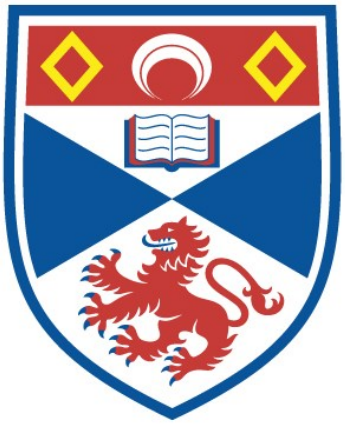
THE ECONOMIC DEVELOPMENT OF JORDAN, 1948-1966

Ahmed Abrahim Mango

A Thesis Submitted for the Degree of PhD
at the
University of St Andrews



1969

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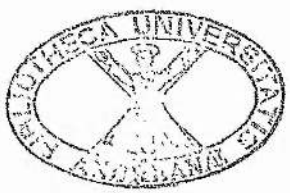
by

Ahmad Abrahim Mango

Thesis submitted for the Degree of
Doctor of Philosophy in the University
of St. Andrews, Scotland.



August 1969

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DEDICATION

To the memory of my father

DECLARATION

I hereby declare that this Thesis is based on my own readings and research, that it has been composed by myself, and that it has not been accepted in any previous application for a higher degree.

Ahmad Abrahim Mango.

St. Andrews, Scotland.

August 1969.

CERTIFICATE

I certify that Ahmad Abrahim Mango has devoted not less than 9 terms to research work under my supervision, that he has fulfilled the conditions of Ordinance No. 16 (St. Andrews), and that he is qualified to submit this thesis in application for the degree of Doctor of Philosophy.

R.S. May.

..... August, 1969.

STATEMENT OF QUALIFICATIONS

I graduated at the London School of Economics in June 1965 with a B.Sc. (Econ.) Second Class Honours. I returned to Jordan where, through joining our family firm, I obtained first-hand knowledge of the Jordan economy and its major development projects and schemes. In October 1966 I was admitted as a research student to the University of St. Andrews and in the process of carrying out my research since that time I went to Jordan on three occasions during which I collected additional data for my thesis.

AHMAD ABRAHIM MANGO.

St. Andrews, Scotland,
August 1969.

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My thanks are due to Mr. R.S. May for supervising my work. I gained immensely from his comments upon drafts of the thesis and from the numerous discussions I had with him and for which he gave a great deal of his time. To Professor J.W. Nisbet I am indebted for his constant encouragement and guidance. I am grateful for the readiness with which the numerous officials of the various government departments and private establishments in Jordan made available the data required for this project.

PREFACE

The aim of this study is to analyse the main developments that occurred in the Jordan economy during the period 1948-1966. The complex of factors (the influx of refugees; foreign assistance; the import surplus, etc.) involved in the rapid development of the Jordan economy during this relatively short period renders it a useful case study that can help shed a great deal of light on a number of issues of great importance for many of the developing countries (e.g. the effect of foreign aid on economic structure). Although this has been a period of swift development for the Jordan economy which exhibited a rate of growth that ranks amongst the highest achieved in the developing countries, no studies of its economic development have been undertaken apart from the IBRD report covering the initial period up to 1954.[1] Accordingly material had to be obtained at first hand from the Jordan Department of Statistics' publications in addition to certain data privately obtained.

Although the Arab-Israeli War of 1948 and the upheaval it resulted in marked a turning point in the modern history of Jordan, we introduce our study by a brief survey of the historical background

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1. International Bank for Reconstruction and Development, The Economic Development of Jordan, Baltimore 1957.

of the country which is essential for placing in proper perspective the period 1948-1966 upon which we are focusing our attention. The demographic upheaval of 1948 and its effects are analysed in Chapter II dealing with population and the labour force. Special emphasis is placed upon the internal migratory movements which this upheaval precipitated and which are throughout our period superimposed upon demographic changes accompanying the process of development. We next proceed to Chapter III which is divided into two parts: Part One deals with the growth of production and expenditure and places special stress upon the effects of foreign aid on the structure of the economy, viz., the relaxation of sectoral interdependence and the concentration of services industries in the economy. In Part Two of this chapter, monetary analysis is utilized to shed further light upon basic factors (such as foreign aid) in the development of the economy, and helps scrutinize and carry further the findings of the first part of this chapter. Chapters IV and V deal in detail with the development of Agriculture and Manufacturing which have been already briefly surveyed in Chapter III within the context of the over-all growth of the economy. Foreign trade and the balance of payments are examined in Chapter VI: trends in foreign trade are found to reflect vividly the developments that occurred in the various sectors of the economy, and the position of Jordan regarding its balance of payments (foreign trade proportions, the trade gap, the structure of receipts and payments) is compared with other countries thus revealing the heavy dependence of Jordan on the import surplus

and the foreign transfers that go to finance this surplus. In examining public revenue and expenditure in Chapter VII attention is focused on a further aspect of foreign aid: its role in financing various (not merely development) expenditures of the government. Jordan's position is contrasted in this respect with that of the other developing countries thus indicating the extent of the direct and indirect dependence of public revenue on external transfers. Chapter VIII examines the finance of development during our period and shows the important role that foreign saving has played in the finance of capital formation. Here the question of the effect of foreign aid on the Incremental Capital Output Ratio (a question touched upon in Part One of Chapter III in connection with the expenditure on capital formation) is further examined, thus bringing out a factor of importance for the developing countries in general. In the Conclusion we restate briefly the main findings of our study and relate them to recent developments following the Arab-Israeli War of June 1967 which occurred after the close of our period. Throughout our study international comparisons are utilized whenever possible to enable us to evaluate more precisely the characteristics and development of the Jordan economy.

CHAPTER I

CHAPTER I:

INTRODUCTION : NATURAL CHARACTERISTICS AND HISTORICAL BACKGROUND

Natural Characteristics

The Hashemite Kingdom of Jordan is situated in a key position at the centre of the Arab world where the Arabian Peninsula merges with the Northern Arabia and where the African meet the Asian Arab states. This geographical position, as the land bridge of the Middle East, has been in fact one of the main factors affecting its history throughout the ages. More recently, its geographical location in relation to Palestine has been perhaps the most important single factor affecting Jordan's modern history.

The River Jordan flows between the two banks of the Kingdom through the Jordan Valley in the Great Rift and into the Dead Sea at 1200 feet below sea level. The east bank forms the north-western tip of the Arabian Peninsula sloping upwards from the desert in the south-east to form the Jordanian plateau. The west bank comprises the hills of Palestine, running in a north-south direction, which remained under Arab control after the termination of the Mandate and the War of 1948.

Aridity has been throughout the ages one of the main constraints upon economic activity in Jordan. More than 86 per cent of Jordan's

total area of about 97,000 square kilometres receives an average annual rainfall of less than 200 millimetres. Rainfall becomes more plentiful with altitude and the east bank uplands, in an area roughly between Madaba to the south of Amman and the Syrian border receive relatively more rain (between 200 and 500 millimetres annually). The uplands of the west bank receive still more plentiful rain (over 600 millimetres in the north). In the Jordan Valley-Dead Sea-Wadi Arabah depression climate becomes of a tropical or semi-tropical type with little or no rainfall (see Map 1).

The rain belt largely determines both the pattern of settlement and of cultivation. Only 4 per cent of the total population lives in the desert area which covers about three quarters of the country. The rest of the population is settled in about a quarter of the country's area in the north west.[1] As far as cultivation is concerned, only 8 per cent of Jordan's total area has been classified as cultivated and of this only about one tenth is under irrigation.[2] Dry farming of cereals (wheat and barley mostly) occurs mainly on the east bank plateau, supplemented by animal husbandry (sheep and to a lesser extent goats and camels). Vegetables are grown in the Jordan Valley and on the west bank. Fruit and olive trees are found

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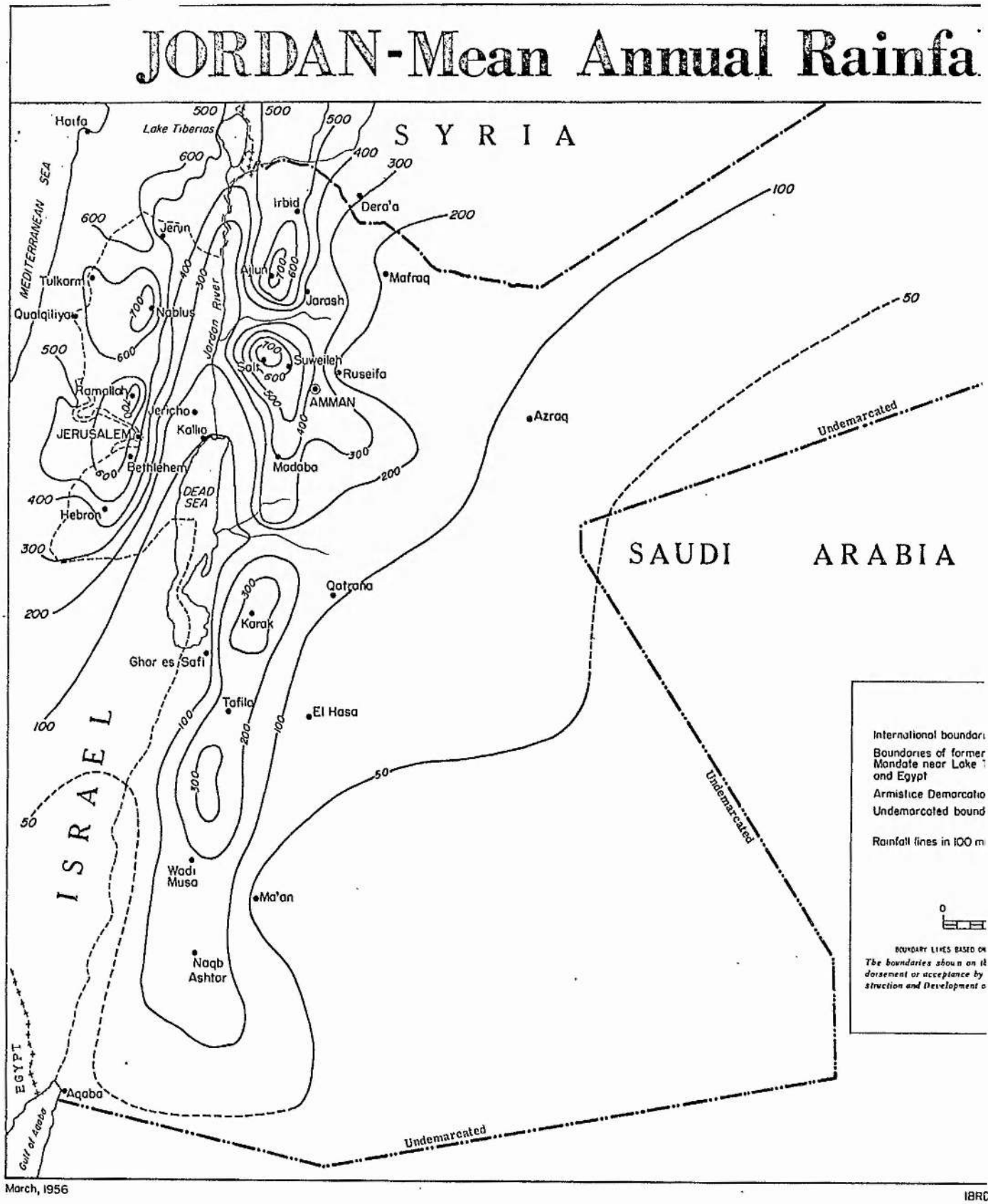
1. Department of Statistics, First Census of Population and Housing (Amman 1964), Volume 1, p. 30.

2. Percentages based on Department of Statistics, 1953 Census of Agriculture (Amman, n.d.). However as we shall see in the chapter dealing with agriculture these percentages seem to refer to cultivable rather than cultivated land, and to land having water rights rather than land actually irrigated.

Map 1



Source: IBRD, op. cit., Map 1.

mainly on the west bank, although some are found in the Jordan Valley (e.g. citrus) and to an increasing extent on the highlands of the east bank (olives and a variety of fruits in the Ajlun mountains).

Water resources for irrigation are very limited, being concentrated in the Jordan River (and its tributary the Yarmouk) in the Jordan Valley where, through recent irrigation schemes, most of the intensive farming in Jordan takes place. Irrigation also takes place on a more limited scale in some other areas through the use of springs and perennial streams (e.g. in some parts of the West Jordan Valley, and in the Ghor Safi south of the Dead Sea). More recently, hydrological surveys of the east bank[1] have discovered large amounts of subterranean waters suitable for irrigation and a start on their exploitation has been made. Potash (from the Dead Sea) and phosphates on the east bank form the country's main mineral wealth: limited deposits of copper, manganese, iron and sulphur are known to exist.

Jordan is landlocked apart from its only outlet to the sea at Aqaba on the Red Sea which is more than 300 kilometres to the south of the centres of population and activity in the north-western parts of the country.

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1. See Sir M. Macdonald and Partners, East Bank Jordan Water Resources (London 1965), containing a Geological Survey and reports on the Engineering Investigations carried out during 1962-1964.

Historical Background

Jordan is a "re-developing" rather than merely a developing country, being both very ancient and very new. As far back as the prehistoric period (12,000-3,000 B.C.) scattered settlements in Jordan extended as far south as Aqaba:[1] not only the northern uplands but also the now uninhabited southern parts witnessed periods of tremendous growth and prosperity during which man overcame nature's basic constraint of aridity, extending cultivation and pushing the frontier of the desert backwards. The modern state, on the other hand, has existed in its present form only since 1948 and has its beginnings in the Transjordan Emirate established under the British Mandate in the years immediately following the end of the First World War.

Ancient periods of growth were determined by the ability to exploit successfully the locational and natural resources of the area which is now Jordan: to exploit Jordan's locational potential as a "land Suez Canal"[2] through which caravans could link the Mediterranean and its coastal regions with the East and with Africa

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1. Comprehensive descriptions of these prehistoric and subsequent ancient periods are given in P.G. Phillips, The Hashemite Kingdom of Jordan, (Chicago 1954); Nelson Glueck, The Other Side of the Jordan (New Haven 1940) and Rivers in the Desert (London 1959).

2. An interesting development along this line occurred more recently during the Suez Crisis in 1956-1957. The value of goods passing in transit through Jordan shows a sudden increase of more than 50 per cent during 1957 when the Canal was closed. With the subsequent re-opening of the Canal the value of such transit traffic returned to its original level (see Department of Statistics, Statistical Yearbook 1967 /Amman/, p. 150).

through Aqaba on the Red Sea; to exploit and develop agricultural resources through intricate systems of water and soil conservation (flood control, terracing, irrigation, etc.), and to exploit whatever mineral wealth existed. As far as the latter is concerned, and in at least one period of ancient growth, industrial development based upon the mineral wealth of Wadi Arabah, south of the Dead Sea, reached such proportions that it shifted the centre of activity from north to south, Aqaba becoming an industrial port where copper from the Wadi Arabah was smelted and exported to the East in return for spice and gold.[1]

Development along these three main lines had, however, one essential common pre-requisite: security. A powerful centralized authority was needed to protect and maintain the highly organized irrigation system upon which agriculture depended, to make possible the exploitation of any mineral wealth and to provide security for caravan traffic. As Issawi put it, "A leitmotive in the long history of Syria - and indeed, that of the whole Middle East - has been the struggle between the desert and the sown . . . between the livestock-raising nomad and the sedentary peasant-farmer. The balance of power between the two, and hence the location of the margin of cultivation, has depended on the strength of the government."[2] This especially affected peripheral areas like Jordan, which lay in

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1. Nelson Glueck, The Other Side of the Jordan, pp. 84-86.

2. Charles Issawi (ed.), The Economic History of the Middle East 1800-1914 (Chicago 1966), p. 285.

between the Fertile Crescent and the arid desert.

Such conditions have resulted in many cycles of growth and decay in the long history of the Middle East: the last such cycle shows the setting in of a gradual secular decline from about the twelfth century up to the eighteenth, followed by a general revival from the nineteenth century onwards. By the eighteenth century economic activity in Syria reached such a low ebb that the margin of cultivation was pushed nearer to the sea than in Roman or early Arab times, "and in some parts it actually reached the sea".[1] As late as the 1850s the Ajlun-Irbid region of Jordan was described as having "extensive arable lands" but "roving Arabs /Bedouins/ have laid it completely waste".[2] However, from that time onwards, Greater Syria, of which Jordan was a peripheral part, witnessed a period of economic expansion during which the frontiers of settlement and cultivation were substantially extended (see Map 2). Two inter-related factors were at the basis of this: (a) the introduction of centralization and security for the first time in centuries, and (b) a rise in the demand for agricultural products.

(a) Security came initially with the Egyptian occupation of Syria in 1831-1841. This, together with a more successful Ottoman centralization policy in the 1870s and 1880s, made possible the

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1. Ibid., p. 3.

2. A note presented to the Ottoman authorities by the British Consul in Damascus, Wood to Clarendon, February 12, 1855, F.O. 78, No. 118. Quoted from Issawi, op. cit., p. 258 fn.

re-settlement of large areas that had lain deserted for centuries: city people and merchants were encouraged to invest in land as the demand for agricultural products was high: colonization by peasants resulted and, Circassians (Muslim immigrants from southern Russia during the Russo-Turkish war) were settled by the Ottoman authorities on the edge of the desert to act as a buffer against Bedouin tribes. "The area of 'Transjordan' was being brought under direct Turkish administration. A Turkish quaim maqam [local governor] was established in Ajlun in 1851. In 1867 an expedition penetrated the Belka (the Salt-Amman-Madeba area) and a governor was installed at Salt. Two years later the Beni Sakhr [the tribe then controlling the edge of the desert in Jordan] suffered at the hands of a punitive expedition . . . from this time onwards the country was gradually pacified, there was much peasant immigration from Palestine and elsewhere, and agriculture was greatly extended."[1] In 1876 when Doughty passed through what is now Jordan on his way south with the Haj (pilgrimage) caravan he thus described the situation in his Arabia Deserta: "The desert . . . shall become a plough-land, so might all this good soil . . . return to be full of busy human lives; there lacks but the defence of a strong government."[2] Some years later, Gertrude Bell wrote in her book of travels, The Desert and the Sown,

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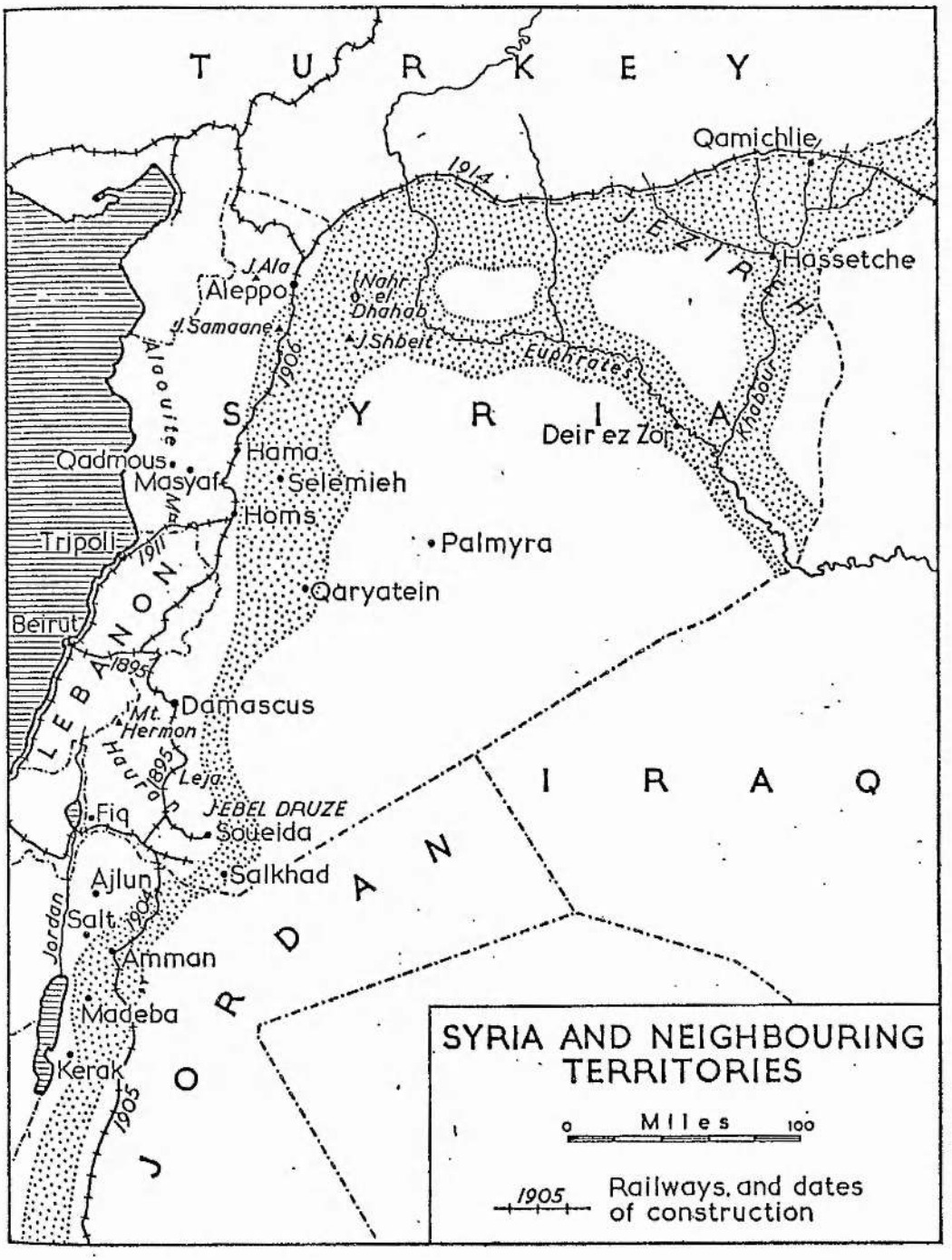
1. Norman Lewis, "The Frontier of Settlement in Syria 1800-1950," International Affairs XXXI (January 1955), p. 53.

2. Charles M. Doughty, Arabia Deserta (London 1921), Vol. 1, pp. 17-18. Quoted in Norman Lewis, op. cit.

Map 2: The Frontier of Settlement in Syria, 1800-1950



The stippled area represents very approximately territory in which were few or no permanent inhabitants and little cultivation in 1800, and which is now cultivated and inhabited by a sedentary population

Source: Norman Lewis, op. cit., p. 49.

that in the span of only five years (1900-1905) between her two visits to the area, the people of Jordan "had pushed forward the limit of cultivation two hours' ride to the east, and proved the value of the land".[1]

(b) The rise in demand for foodstuffs came from both within the area and from abroad. Improved hygiene in areas such as Lebanon and Palestine resulted in population growth through reducing the death-rate.[2] This put pressure on available food supplies, especially towards the second half of the nineteenth century. In addition, the general opening-up of some parts of the region (e.g. Lebanon) to the foreigners and to the Western World, coupled with the rise in demand for agricultural products in Europe from the late 1840s onwards, put further pressure on supplies and was an important factor in shifting subsistence agricultural activities into market-oriented ones through the production of cash crops.[3] The British Consul in Jerusalem noted in 1850: "As this country has been drained of corn by an extensive exportation from the Seaports for Europe and especially for England - a scarcity would have been felt had not

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1. Gertrude Bell, The Desert and the Sown (London 1907), p. 23. Quoted also in Norman Lewis, op. cit.

2. Prior to the 1930s no reliable population statistics exist for most parts of Greater Syria. However such factors as improved hygiene, a sharp reduction in epidemics, the near-elimination of famine and more widespread security were all at work during the 19th century thus supporting such estimates of population increase as exist: in the 1830s the population of Greater Syria is estimated at around 1.3 million; for 1890 an estimate of 27 million is given and for 1910, 3.5 million (Issawi, op. cit., p. 209).

3. Ibid., p. 227.

the Arabs beyond Jordan [east bank Jordan now] cultivated grain to an unusual degree - which produce they have lately brought to Jerusalem in large quantities."[1]

The advent of the British Mandate and the establishment in 1921 of a central administration in Jordan under Emir Abdullah[2] gave further impetus to this expansionary trend. The Arab Legion successfully spread security and stability throughout the country and swift progress was made in putting the chaotic land tenure system of the country on a firm modern basis.[3] Among the various mandated territories of the region the greatest progress in this field was made in Jordan where by 1950 about two thirds of the total cultivated area was registered in contrast to a little more than 40 per cent in Syria and about a half in Iraq.[4]

While security in its various forms was thus ensured, the demand (both external and internal) for foodstuffs continued to rise. Externally, the continued expansion of economic activity in the region in general, and in Palestine in particular, kept a high pressure upon agricultural supplies throughout this period between the wars. The

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1. Finn to Lord Palmerston, February 15, 1850, F.O. 78, no. 839. Quoted from Issawi, op. cit., p. 227.

2. The San Remo Conference entrusted on April 25, 1920, to Great Britain the territory of Transjordan. In March 1921 the British Government recognized Emir Abdullah as ruler of Transjordan.

3. See section dealing with "Land Tenure" in the chapter on Agriculture.

4. Gabriel Baer, "Land Tenure in the Hashemite Kingdom of Jordan," Land Economics XXXIII, No. 3 (1957), p. 187.

swift expansion that occurred in the economy of Palestine during this period was of special importance for Jordan with which it had close links: ". . . the area now comprising Jordan formed the hinterland of the coastal region /i.e. Palestine/, becoming more closely connected with it and more dependent upon it with the advance of living standards and the breakdown of the ancient nomadic and self-sufficient way of life."[1] Internally, the establishment of government administration and the financial support it received through British grants and loans, coupled with the continued immigration of not only peasants but also traders, helped to increase further the domestic demand for foodstuffs, thus accelerating the process of agricultural expansion.

Development along the whole of this pattern was greatly pushed further during the Second World War. Two main factors lay behind this: on the one hand Allied policy during the war encouraged the expansion of agricultural production; imports for civilian use were controlled and limited through the Middle East Supply Centre, and domestic production was encouraged to expand through various devices.[2]

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1. International Bank for Reconstruction and Development, The Economic Development of Jordan (Baltimore 1957), p. 47.

2. The Second World War caused a severe shortage of shipping and port facilities in the Middle East. The Middle East Supply Centre was set up in 1941 to control and allocate such facilities, ensuring the supply of necessities for local civilian needs while at the same time maintaining an adequate flow of war materials to the Allies. The Centre was disbanded in 1945. A comprehensive survey of its activities is contained in M.W. Wilmington's "The Middle East Supply Centre: A Reappraisal," The Middle East Journal, Vol. 6, No. 1 (1952), pp. 144-166.

On the other hand, increased military expenditures within the area by both the local governments and the Allies (road construction, local purchases of various products, etc.) put further pressures on supplies and simultaneously generated additional local incomes. With the restriction of imports, prices were high[1] and agricultural expansion proceeded at an ever faster rate.

Although Jordan thus witnessed substantial economic expansion during this period, on the eve of the termination of the British Mandate in Palestine, whatever progress had been made did not go beyond agriculture and commerce. Whatever additional income was generated did not find its way into "modern" productive industrial investments. Imports were relied upon to a great extent: coming either from Palestinian industry or from overseas and through Palestine.[2] Jordan's comparative advantage lay in agriculture, products of which were exchanged for imported manufacture. Modern manufacturing industry did not develop because of the small size of the market (Jordan had only about 375,000 people as late as 1947); because of lack of raw materials and sources of power, and of course because of the development of manufacturing in Palestine which reached

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1. The following cost of living indices give an idea about the degree of inflation that occurred during the Second World War: with a base of (100) in 1948 the index stood at (104) in 1945 as compared with (36) in 1939 in Egypt and (123) as compared with (20) in Lebanon. Royal Institute of International Affairs, The Middle East (London 1954), p. 562.

2. A customs union existed between Jordan and Palestine under the Mandate, and Jordan had free-zone facilities at the port of Haifa. See chapter dealing with Manufacturing.

high levels during the Mandate period.

However, this pattern that had emerged during nearly a century and a half was to be suddenly and fundamentally disrupted. The events of 1948 put an end to further development along these lines and completely changed the framework within which economic activity was undertaken. It is in this respect that Jordan's location vis-à-vis Palestine, as mentioned at the outset, has been perhaps the most important single determinant of its modern history. Those events, coupled with the changes that they generated, can be regarded as potentially thrusting Jordan into, to use Kuznets' words, a new "economic epoch" which not only permitted but was in a sense compulsive to "modern economic growth".[1]

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1. Simon Kuznets, Modern Economic Growth (New Haven 1967), pp. 1-16.

CHAPTER II

CHAPTER II:

POPULATION AND THE LABOUR FORCE

Demographic factors have had a dramatic and decisive impact upon the Jordan economy and its development during the last two decades. Table I gives details of population and its growth between 1948 and 1961.

TABLE I: Population of Jordan : 1948, 1952 and 1961 (000 persons)

	End of 1947	Influx of Refugees 1948	Total 1952	Total 1961
East Jordan	375	70		
West Jordan	460	280		
TOTAL	835	350	1,329	1,706

Source: Figures for 1947 and 1948 from IBRD, The Economic Development of Jordan, Baltimore 1957, p. 49. Figure for 1952 from Department of Statistics, 1952 Census of Housing, Statistics for Administrative Divisions and Principal Towns (Amman 1953). Figure for 1961 from Department of Statistics, First Census of Population and Housing (Amman 1961).

The demographic aspect of the events of 1948 is indicated by the two sets of figures for 1947 and 1948. Such a sudden mass-movement of population was bound to have far-reaching and long-lasting effects. In fact the study of population and its growth since that year reveals two superimposed trends: on the one hand there appear demographic changes that can be associated with the process of economic development;

on the other hand there were those changes that can be traced to the dislocation of 1949, the effects of which in this respect were still spending themselves out at the close of the period under review. These trends come out as manifestations of the main economic forces and under-currents determining the economic development of the country during this period. A detailed analysis of the relevant data will shed much light on the developments that took place then.

(1) The Growth of Population

The total population of Jordan reached its 1961 level through, initially, the sudden increases of 1948 (during which the population trebled) and, since that time, through a very high fertility rate coupled with a declining death rate. During the nine years between 1952 and 1961 total population increased by 28.4 per cent (i.e. at an average annual rate of 2.8 per cent) and detailed adjustments carried out through the returns of the 1961 Census[1] revealed (for 1959 to 1963) a birth rate of 47 per 1000 of the population, a death rate of 16 per 1000 of total population, a total fertility rate (i.e. average number of children born to every woman passing through childbearing age) of 6.8 children per woman, and a gross reproduction rate (i.e. average number of girls born to every woman passing through child-bearing age) of 3.3 girls per woman. In spite of the described

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1. See the Department of Statistics, Analysis of the Population Statistics of Jordan, Volume 1 (Amman 1966): First Report, "On the reliability of vital registration in Jordan."

shortcoming of the Vital Statistics for the years between the 1952 and 1961 Censuses, they can be still utilized in indicating a declining death rate during this period.

TABLE II: Births and Deaths per 1000 of Total Population, 1952-1961

Year	Births per 1000	Deaths per 1000
1952	34.6	11.2
1953	37.0	10.9
1954	37.9	10.3
1955	40.1	9.1
1956	37.2	8.3
1957	39.3	8.4
1958	43.3	7.2
1959	38.3	7.2
1960	45.5	6.9
1961	40.4	7.0

Source: based on data given in the Statistical Yearbook, relevant years.

The detailed adjustments carried out in the light of the 1961 Census returns revealed that for the period 1959 to 1963 under-reporting of births amounted to 5 per cent of all births, while deaths were under-reported to the extent of 60 per cent in spite of successive improvements in the coverage and collection of data since 1952. Nevertheless, the above figures can still be taken as indicating a declining death rate: thus, taken as they are, they show a fall in the death rate from 11.2 per 1000 in 1952 to 7 per 1000 in 1961, in spite of the improved collection of data during successive years. Now turning to the

adjusted rate, and even if we assume that the reporting of deaths in 1952 was equal in its coverage to deaths reporting in 1961 we still get a fall in the adjusted death rate from 25 per 1000 in 1952 to 16 per 1000 in 1961. This substantial fall in the death rate during the ten years between 1952 and 1961 is the main factor behind the fast growth of population during these years. This is a well-known factor which is generally behind the very fast growth of population in the developing countries during the recent past. In the case of Jordan the decline in the death rate (resulting from advances in public health as occurred generally in the developing countries) may well have been accelerated by the possibility of an unusually high death rate amongst the refugees at the outset of the period as a result of their severely inadequate living conditions initially. As far as the birth rate is concerned, the slight rise indicated by the figures for 1952-1961 may have been the result of improved coverage and collection of data plus the possible effect of an improvement in standards of living resulting initially in an actually rising birth rate. Furthermore, just as the death rate may have been at an unusually high level amongst the refugees at the outset, so their birth rate may have been at an unusually low level through such factors as temporary separation of families, delayed marriages, etc.

(2) Geographic Distribution

We have seen that during the period 1952-1961 the total population in Jordan increased by 2.4 per cent from 1,329,000 in 1952 to

1,706,000 in 1961. As can be seen from the following figures, the major part of the population (96 per cent) was concentrated in 1961 in those "settled" areas of the country (the northern and north-eastern parts) which account for no more than a quarter (24 per cent) of the total land area of Jordan. This pattern of settlement has resulted in a sharp contrast in the density of population as between the "settled area" and the remainder of the country which is classified as "desert".[1]

TABLE III: Location of Population and Area, 1961

	Persons		Area		Density
	Number	% of Total	Km^2	% of Total.	persons/Km^2
Settled Area	1,640,039	96	22,019	24	74
Desert Area	66,187	4	68,166	75	1
Jordan	1,706,226	100	90,185	100	19

Source: First Census of Population and Housing 1961 (Amman 1964), Vol. 1, p. 30.

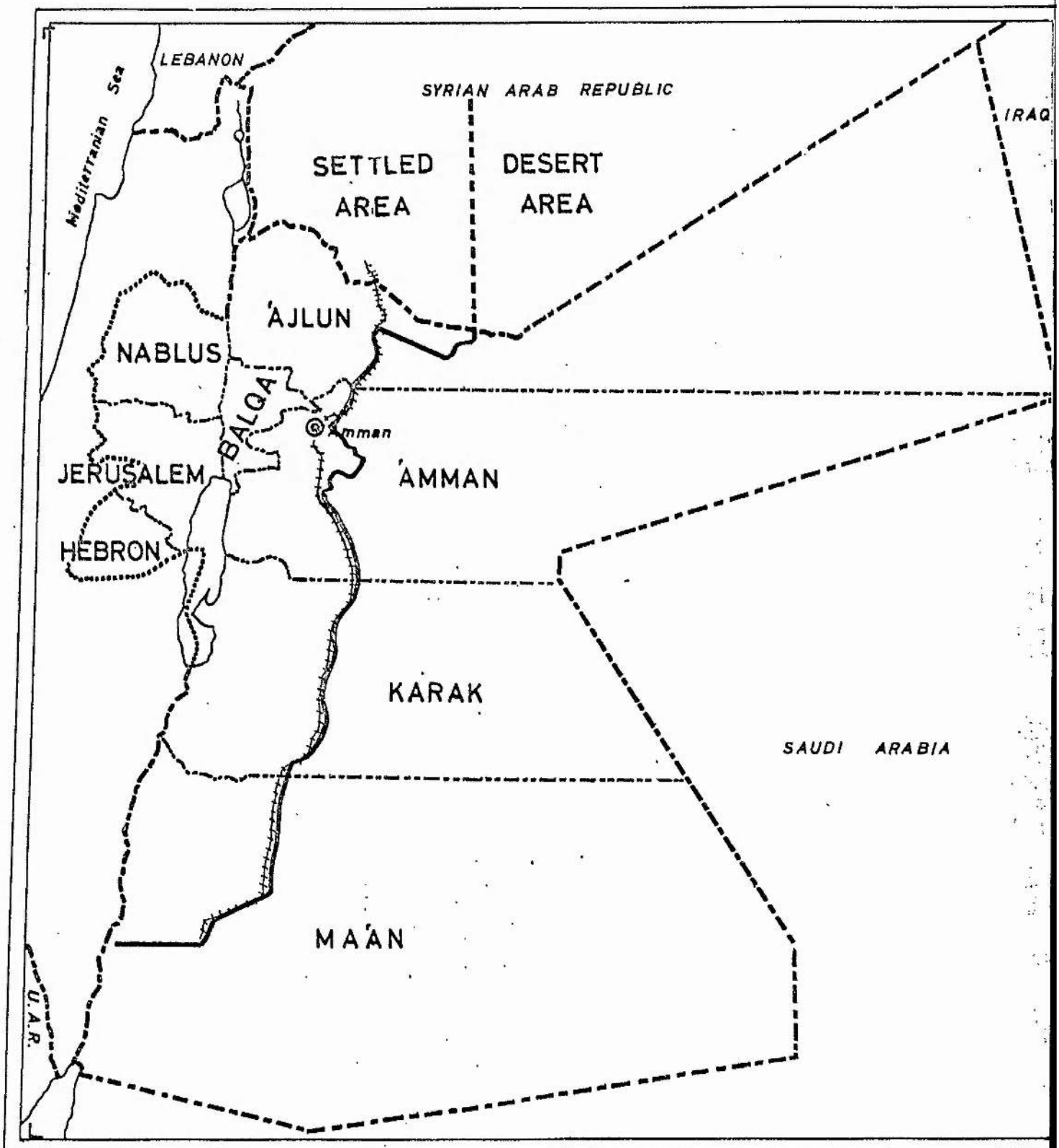
Thus while there were 19 persons per square kilometre in the country as a whole, there was only 1 person per square kilometre in the desert area, while the settled area of the country had a density of 74 persons per square kilometre. While the factors governing the

1. "The desert area as defined for census reports includes the entire area east of the railway line and village settlement areas (whichever lies farthest east) and south of latitude 93° Palestine Grid (29°57.5' North). The settled area is defined as the area of Jordan excluding the desert area" (First Census of Population and Housing 1961, Vol. 1, p. 31).

Map 3:

SETTLED AND DESERT AREAS

THE HASHEMITE KINGDOM OF JORDAN FIRST CENSUS OF POPULATION & HOUSING 196



Dept. of Statistics of Jordan
Map DSC 4 (February 1965)

10 0 10 30 50
Kilometres

International boundary
District boundary
Railway

overall pattern of settlement have been discussed in the previous chapter, what is of further significance is the variation in the density of the population within the settled area itself, as can be seen from Table IV.

TABLE IV: Distribution of Population Within the Settled Area, 1961

District	No. of Persons	Area Km^2	Density No. of persons/Km^2
Amman	517,519	2,491	168
Balqa	97,057	1,116	71
Ajlun	256,017	3,885	66
Karak	63,064	4,849	13
Ma'an	18,932	4,028	5
Total East Bank	834,589	16,369	51
Hebron	119,432	1,082	110
Jerusalem	344,270	2,059	167
Nablus	341,748	2,509	136
Total West Bank	805,450	5,650	143

Source: First Census of Population and Housing 1961 (Amman 1964), Vol. 1, pp. 30-31.

Here we can see that the settled area of the east bank has had a density about one third that of the west bank. While it is true that rainfall on average tends to be higher in the west bank than the east bank and the west bank has relatively a larger proportion of cultivated land, these factors per se would not result in a density so

much higher in the west than the east bank. The other basic factor behind the variation in density is the fact that the major part of the Palestine refugees who came into Jordan settled initially in the west bank (see Table I, p. 13 *supra*). This led to a much higher density in West Jordan than in East. However, throughout the period we have forces at work that tend to spread the population more evenly, especially in the case of the main part of the east bank (Amman District) vis-à-vis the west bank: thus in fact in 1961, as can be seen from the figures above, Amman District had a higher density of population than any other District in the Kingdom. The distribution of the increase in population amongst the various parts of the country was far from even, most of it in fact (84 per cent) going to the east bank.

TABLE V: Distribution of Increase in Population Among Various Districts, 1952-1961

District	Population		Increase between '52-'61	
	1952	1961	Number	Percentage
Amman	218,000	434,000	215,000	57
Balqa	65,000	79,000	14,000	4
Ajlun	214,000	274,000	60,000	16
Karak and Ma'an	90,000	114,000	25,000	7
Nablus	315,000	342,000	27,000	7
Jerusalem	301,000	344,000	43,000	11
Hebron	126,000	119,000	-6,000	-2
Jordan	1,329,000	1,706,000	377,000	100

Source: based on data given in First Census of Population and Housing 1961 (Amman 1964), Vol. 1, p. 29.

More than half the increase (in fact 57 per cent) in total population went to the Amman District alone. The other districts absorbed varying proportions of the total increase, and consequently the geographic distribution of the population exhibits a marked shift as can be seen from the figures shown in Table VI.

TABLE VI: Geographic Distribution of Population, 1952 and 1961

District/ Region	1952		1961	
	Number	Percentage	Number	Percentage
Amman	218,000	16.4	434,000	25.4
Balqa	65,000	4.9	79,000	4.6
Ajlun	214,000	16.1	274,000	16.1
Karak and Ma'an	90,000	6.7	114,000	6.7
East Bank	587,000	44.1	885,000	52.8
Nablus	315,000	23.7	342,000	20.0
Jerusalem	301,000	22.7	344,000	20.2
Hebron	126,000	9.4	119,000	7.0
West Bank	742,000	55.8	806,000	47.2
Jordan	1,329,000	100.0	1,706,000	100.0

Source: based on data given in First Census of Population and Housing 1961 (Amman 1964), Vol. 1, p. 29.

Thus, while in 1952 the main centre of population was Nablus/ Jerusalem, by 1961 Amman District surpassed each of these two Districts in terms of its population. In fact there is an overall shift in the distribution of population between the two main regions of the country: whereas in 1952 more people (55.8 per cent) were living in the west

bank than the east bank (which had the remaining 44.2 per cent), by 1961 the situation is reversed with the west bank having only 47 per cent of the population, the other 53 per cent living in the east bank. Moreover, while all the west bank districts show a decline in their relative share of population (Hebron also showing a decline in absolute terms), the east bank districts roughly maintain their relative share with the exception of Amman District which shows a substantial gain.

The data examined so far reveal two main trends: a movement of population from West to East, and the orientation of this internal migration mainly towards Amman District in the east bank. These movements in fact have also led to a change in the mode of living of a large part of the population: whereas the "rural population" increased by 111,000 people between 1952 and 1961, the "urban population"[1] increased by 266,000 people during the same period in spite

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1. '"Fully urban" is defined as the population resident in the following types of locality: (1) all district headquarters, (2) all other localities of 6,000 persons or more, (3) all localities of 5,000 to 9,999 persons in which two-thirds or more of the economically active males were engaged in occupations other than agriculture, and (4) those suburbs of Amman and Jerusalem cities in which two-thirds or more of the economically active males were engaged in non-agricultural pursuits, regardless of the size of the locality. Refugee camp localities were excluded from the urban population, unless they were located within the locality classed as urban by the above criteria.'
'Mainly rural and scattered tents [populations] together may be broadly described as the rural population . . . Mainly rural includes all persons not classified as urban with the exception of those enumerated in scattered tents.' First Census of Population and Housing 1961 (Amman 1964), Vol. 4 (Methods Report), pp. 67-68.

of the fact that there were about twice as many rural people as urban in 1952. These changes in the mode of living of the population can be quite clearly seen from Table VII.

TABLE VII: Distribution of Population by Mode of Living, 1952 & 1961

	Total Population		Fully Urban Popn.		Rural Population	
	Number	Percent.	Number	Percent.	Number	Percent.
1952	1,329,000	100	482,000	36.3	847,000	63.7
1961	1,706,000	100	748,000	43.9	958,000	56.1

Source: First Census of Population and Housing 1961 (Amman 1964), Vol. 1, p. 29.

An increasing urbanization is clearly indicated by the data: whereas in 1952 only 36 per cent of the population was fully urban, by 1961 44 per cent was classified under this category. In fact the increase in the fully urban population between 1952 and 1961 amounted to 55 per cent, while in the case of the rural population it amounted to only 13 per cent. In addition, during its fast growth, the fully urban population shows marked shifts in its geographic distribution, whereas the rural population shows much more stability in this respect. This can be clearly seen from Table VIII.

The figures show that the fully urban population was becoming increasingly concentrated in the east bank in 1961. This change in the geographic distribution of the fully urban population is quite striking: by 1961 nearly one half of the fully urban population was concentrated within Amman District. The east bank as a whole

TABLE VIII: Percentage Geographic Distribution of Population by Mode of Living, 1952 and 1961

District/Region	Fully Urban Population		Rural Population	
	1952	1961	1952	1961
Amman	31.2	48.1	8.1	7.7
Balqa	3.2	2.1	5.8	6.6
Ajlun	7.9	8.7	20.8	21.8
Karak and Ma'an	2.7	3.1	9.1	9.5
East Bank	44.9	62.0	43.8	45.6
Nablus	16.0	12.3	28.1	26.0
Jerusalem	31.7	20.6	17.5	19.9
Hebron	7.4	5.6	10.6	8.5
West Bank	55.1	38.0	56.2	54.4
Jordan	100.0	100.0	100.0	100.0

Source: First Census of Population and Housing 1961 (Amman 1964), Vol. I, p. 29.

accordingly increased its share of fully urban population from 45 per cent in 1952 to 62 per cent in 1961. However, in contrast to this, the geographic distribution of the rural population shows very little change in relative terms as between 1952 and 1961.

Our analysis so far has revealed the following trends: a general migratory movement from west to east, a movement which is mainly oriented towards Amman District; increasing urbanization occurring mainly on the east bank; and (the counterpart of urbanization) a movement out of the countryside. Table IX presents the data in a way that brings out vividly these three general migratory movements. If

we assume that the natural rate of growth of population to be roughly equal in all Districts, then net migration can be deduced from the difference between the actual rate of growth of population and the natural rate in the various Districts. We have seen that total population increased by 28.4 per cent between 1952 and 1961: therefore the rough pattern of internal migration can be arrived at by calculating the difference between the actual rate of growth in the various Districts and the natural 28.4 per cent rate of growth.[1] Each of the three columns of Table IX portrays one of the three migratory movements.

TABLE IX: Pattern of Population Growth and Net Internal Migration, 1952-1961 (percentages)

District/ Region	Total Population		Fully Urban Population		Rural Population	
	Growth	Net Migration	Growth	Net Migration	Growth	Net Migration
Amman	98.5	70.1	139.6	111.2	8.0	-20.4
Balqa	21.8	-6.6	4.5	-23.9	27.2	-1.2
Ajlun	28.1	-0.3	71.2	42.8	18.8	-9.6
Karak and Ma'an	27.3	-1.1	78.3	49.4	18.8	-9.6
East Bank	51.0	22.6			18.0	-10.4
Nablus	8.4	-20.0	19.8	-8.6	4.7	-23.7
Jerusalem	14.2	-14.2	0.8	-27.6	28.0	-0.4
Hebron	-4.9	-33.3	5.2	-23.2	-9.0	-37.4
West Bank	8.5	-19.9	6.9	-21.5	9.4	-19.0
Jordan	28.4		55.1	26.7	13.1	-15.3

("-" denotes excess of out-migration. Net migration has been assessed by subtracting from each percentage of total growth the 28.4% accounting for natural increase.)

Source: Analysis of the Population Statistics of Jordan (Amman 1966): Third Report, p. 6.

1. This method is adopted in Analysis of the Population Statistics

Now what are the causes and significance, if any, of these three trends?

At the outset of this part of our study it was said that the demographic changes that took place in Jordan during this period can be associated with two main factors: those demographic changes that can be associated with the process of economic development, and those other demographic changes that can be traced to the dislocation of 1948. Let us now spell out these underlying forces at work within the economy which have resulted in the demographic trends which we have identified.

Each of these two main forces (viz., the events of 1948 and economic development) has contributed, to a greater or lesser degree, to the making of the three main demographic trends during this period. Let us therefore see the effects that each of these two forces has had on the various demographic characteristics of the country.

(3) The Events of 1948

As already mentioned, the sudden arrival of around half a million refugees into Jordan at the outset of the period was bound to have long-term and far-reaching effects. The larger part of these refugees initially settled in various parts of the west bank. However in many cases this proved to be a first step in their eventual move to the east bank or even out of the country altogether in search of opportunities for work.

/... of Jordan (Amman 1966): Third Report, "Regional distribution and mode of living of the population of Jordan," p. 6.

The Social Survey of Amman undertaken in 1960 revealed that 30.5 per cent of the total population of Amman during that year was composed of persons born in those parts of Palestine that became Israel, and a further 12.6 per cent were born on the west bank.[1] Now, undoubtedly, some of those people may have moved into Amman prior to 1948. But the point to be stressed here is that the refugees who moved into the west bank in 1948 (which accounted for the major number of total refugees) were bound to be very mobile and must have substantially contributed not only to the internal migration from west to east but to the numbers emigrating out of the country altogether. Table X gives an indication of the extent of their participation in and, undoubtedly, augmentation of migratory movements.

TABLE X: Jordanians Abroad by District of Origin, 1961

District	No. of Jordanians Abroad	Percentage of Total
Amman	8,422	13.4
Balqa	442	0.7
Ajlun	3,376	5.4
Karak	194	0.3
Ma'an	167	0.3
Hebron	1,582	2.5
Jerusalem	17,923	28.5
Nablus	30,757	48.9
Total	62,863	100.0

Source: First Census of Population and Housing, Vol. 1, p. 315.

1. Ministry of Social Affairs, Social Survey of Amman (Amman 1960), p. 53.

The larger part (about 80 per cent) of Jordanians abroad in 1961 came from the west bank. Although these figures do not show a breakdown into refugees and non-refugees, one must keep in mind that over one third of the total population of the west bank was composed of refugees at the outset of the period.

Moreover, more recent data regarding internal migrations show that a substantial part of the migration into the cities of the east bank has come from various districts on the west bank (see Table XII below).

Other than the movement of the refugees as such, the general movement from west to east has been stimulated by, and resulted to a great extent from, the new economic framework which came into being after 1948. Firstly, the west bank itself prior to 1948 was heavily reliant upon employment opportunities in other parts of Palestine that became Israel, or upon opportunities within the west bank which, however, disappeared with the termination of the Mandate and the creation of Israel. It has been estimated that some 40,000 West Jordanians (i.e. west bank inhabitants) were employed in various fields in Palestine prior to 1948: 20,000 of these were accounted for by the British Army and Government Departments under the British Mandate. This employment, it was estimated, represented a support for some 200,000 people, or about 40 per cent of the total population of the area.[1]

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1. R.S. Porter, Economic Survey of Jordan (British Middle East Office 1953), p. 15.

But, secondly, while the demand for labour was thus reduced in the west bank, a new centre or growing point came into being on the east bank as the seat of the central government and thus the centre of activity. Once the trend was started (migration from west to east) it generated from within itself a cumulative process which reinforced it. This cumulative process is illustrated by the fact that out of the total number of people who moved into various east bank cities between 1962 and 1967, about 74 per cent moved to "join their family" (see pp. 32-33 below).

Here it becomes clear how the events of 1948 were behind the various demographic trends in Jordan since that time: the events of 1948 stimulated a general west-east migratory movement; and this migratory movement itself simultaneously resulted in increased urbanization as the migrants went mainly to the cities of the east bank rather than to its countryside. But to complete our analysis of the forces behind population movements we turn now to an examination of the second main factor in this respect, viz., economic development.

(4) Economic Development and Demographic Changes

Increased urban concentration is a phenomenon experienced to varying degrees by the developing countries. The structural transformation a developing economy undergoes involves, as an integral part of itself, a change in the mode of living of the people. The predominance of rural life due to the supremacy of agriculture as an economic activity in a poor country is superseded by a predominance of urban life once

its economy undergoes a structural transformation involving the expansion of its secondary and tertiary sectors. The forces that are at work stem from both sides of the economy: from the agricultural side there is a "push" of people away from the countryside resulting from the transformation of the agrarian structure normally accompanying the process of economic development. Side by side with this tendency for a "push" away from the countryside, the expansion of the secondary and tertiary sectors (the non-agricultural side of the economy) results in an increased demand for labour which is normally met by attracting people from the countryside.

Now in the specific case of Jordan, the economic development that occurred during our period affected the demand for labour in several, and sometimes opposing, ways, especially as far as the agricultural side of the economy was concerned. As we shall see in the relevant part of our study dealing with agriculture, two broad types of development exerted opposing pressures upon the agricultural labour force and population. On the one hand, the normally assumed "release" of agricultural population came in the case of Jordan as a result of the mechanization of dry-farming. But on the other hand developments in certain other agricultural sub-sectors resulted in the absorption of a new and additional agricultural labour force and population. This occurred through the development of intensive irrigated farming (e.g. in the Jordan Valley) in previously thinly inhabited and uncultivated districts. No data are available that would make possible a precise quantification of the resultant effect of

these two tendencies upon agricultural population and labour for the whole of our period. However a study of agricultural population and labour force undertaken in 1967 can be utilized to provide certain indications in this respect. The main difficulty stems from the non-comparability of the returns of this study with those of the 1961 Population Census. However upon reconciling the relevant data in the 1961 Census, the Department of Statistics estimated that the agricultural sector absorbed in 1967 3 per cent more of the total population of working age (i.e. 15-64 years) than it did in 1961.[1] While it is estimated that the total population of working age increased from about 855,000 persons in 1961 to 1,030,000 in 1967, the total agricultural labour force (i.e. including female family labour) increased from about 175,000 to 244,000 in those same years. Accordingly the agricultural labour force increased from 21 per cent of the total potential labour force (i.e. population 15-64 years of age) in 1961 to 24 per cent in 1967.

To turn now to the development of the non-agricultural side of the economy, the pull of the secondary and tertiary sectors of the economy was especially strengthened and re-enforced in the case of Jordan by the particular pattern of growth that occurred during our

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1. Department of Statistics, Population and Labour Force in the Agriculture Sector 1967 (Amman 1968), pp. 33-34 (Arabic). The non-comparability stems from the exclusion of a large part of female family labour from the total labour force in the 1961 Population Census. This aspect of the growth of the agricultural labour force is further discussed in the relevant part of the chapter on Agriculture.

period. As we shall see in the relevant part of our study dealing with the growth of the economy and its structure, the relatively large import surplus enjoyed by the economy greatly accelerated the growth of non-agricultural activities and especially those concerned with the supply of services. In fact, and we shall see this in the appropriate part of our study, the Jordan economy exhibits a heavy concentration in tertiary activities in terms of both employment and product. Such a pattern of growth would undoubtedly enhance the extent of the urbanization that one normally expects to occur in the process of development, for the large and rapidly expanding tertiary sectors are mainly located inthe urban districts. As can be seen from Table IX (p. 24 supra), there was net migration out of every rural area which went to swell up the main urban areas on the east bank: Amman District alone absorbed some 80 per cent (210,000 persons) out of the total increase in urban population (an increase of 266,000) between 1952 and 1961. Furthermore, data available for the period 1961-1967[1] reveal that about 54 per cent of the economically active[2] population that moved into Amman City during this period were engaged in services.

Although no records exist for internal migratory movements as

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1. Department of Statistics, Population Census and Internal Migration for Amman, Jerusalem, Zarqa, Ruseifa, Irbid and Aqaba, (Amman 1967).

2. "The economically active population comprises all persons working (whether full or part time) and seeking work, and includes all members of the armed forces" (First Census of Population and Housing, Vol. 2, p. xv).

TABLE XI: Economically Active Population that Moved to Amman City, by Industry, 1962-1967 *

Industry	No. of Persons	Percent. of Total
Agriculture	139	1.8
Mining and Quarrying	116	1.5
Manufacturing	932	12.5
Construction	935	12.5
Electricity and Water Supply	42	0.6
Commerce	765	10.2
Transport and Communications	433	5.8
Services	4031	53.9
Not adequately described	91	1.2
Total	7484	100.0

Source: Population Census and Internal Migration (Amman 1967), p. 37.

(* beginning of 1962 to 1.5.1967)

such between 1952 and 1961, the just-cited study of internal migration into the main east bank urban centres between 1962 and 1967 can be utilized to further illustrate some of our findings in this respect. As can be seen from Table XII, out of a total number of 44,054 migrants into the four main east bank urban centres, nearly one half of those coming from within Jordan came from various districts on the west bank. And out of a total number of 27,661 persons moving into Amman City, more than one half of those coming from within Jordan came from the west bank.

Furthermore, the cumulative aspect of this migration is indicated by the fact that 32,535 persons (74 per cent of the total) moved to

TABLE XII: Net Movements of Persons from Governorates to Amman City, Zarqa, Ruseifa and Aqaba Towns, 1962-1967 *

To City /Town	From Governorates						
	Amman	Other east bank	Jerusalem	Nablus	Hebron	Outside Jordan	Total
Amman	4161	7299	6746	2406	2690	4359	27,661
Zarqa	2474	5657	1785	1629	458	519	12,522
Ruseifa	594	292	125	366	112	52	1,541
Aqaba	781	794	214	191	263	87	2,330
Total	8010	14,042	8870	4592	3523	5017	44,054

Source: Population Census and Internal Migration (Amman 1967), p. 6.
(* 1.1.1962 to 1.5.1967)

join their families. Those moving because of transfer of work numbered 7331 (17 per cent) and those seeking work were 3051 (7 per cent), and of the remaining 2 per cent, less than one half moved for education. The fact that in such urbanization wide use is made of the "extended family" system that is normally associated only with rural life is indicated by the large ratio of the 15—59 years age-group amongst those who gave "joining the family" as their reason for migration. Such a ratio of persons of working age amongst this group of migrants reaches a maximum of 47 per cent in the case of those moving into Amman City and a minimum of 38 per cent in the case of migrants to Aqaba.[1]

At this juncture the forces underlying the demographic changes that occurred in Jordan during our period become quite clear. The

1. Population Census and Internal Migration (Amman, 1967), relevant tables.

west-east migration partly resulted from the demographic upheaval of 1948 still spending itself out. This was reinforced by the pull of the large and rapidly expanding non-agricultural activities (in the urban districts), the share of which in both the total employment and the total product of the economy was especially augmented by the particular pattern of economic growth that occurred in Jordan. However, the pull of the urban centres was, as we have seen, somewhat dampened by the absorption of additional labour into the newly developed intensive and irrigated agricultural sub-sectors. Whilst our attention so far has been mainly concentrated on the dynamic aspects of the population during our period, let us now have a look at some of the important characteristics of the population that were revealed by the 1961 Census.

(5) Some General Characteristics of the Population

We start our examination of the main characteristics of the population by looking at its age structure and at the proportion of economically active persons amongst the total potential labour force (i.e. amongst persons 15-64 years of age).

The first fact that emerges from Table XIII (below) is the high proportion (45.4 per cent) of children of less than 15 years of age in the total population. This ratio contrasts with about 22 per cent in some European countries and about 31 per cent in the U.S.A. (see Table XIV), but is similar to that found in other Arab countries in reflection of their high fertility rates. Secondly, out of a total

TABLE XIII: Age Structure of Population and Economically Active Persons (15-64 years) by Sex, 1961

Age Group	Total Popula'n.		Economically Active Persons					
	No. of persons	% of total	Male		Female		Total	
			No.	%*	No.	%*	No.	%*
Less than 15 yrs.	774,516	45.4						
15-64 yrs.	855,663	50.1	342,069	81	20,227	5	362,246	42
65 yrs. and over	76,042	4.5						

Source: First Census of Population and Housing 1961, Vol. 1, p. 35 and Vol. 2, p. 3.

(* percentages refer to the numbers of economically active persons to the appropriate totals of persons within the 15-64 years age-group)

potential labour force of 855,663 persons, only 362,296 (or 42 per cent) were found to be economically active. This low proportion of economically active persons is largely the result of the larger number of females within that age-group being not economically active. Thus while 81 per cent of males 15-64 years of age were found to be economically active, only 5 per cent of females of that age-group were so active. In fact this low proportion of economically active persons when combined with the high proportion of children in the total population results in a high dependency load whereby every person within working age-limits has to support a large number of dependents (Table XIV).

Thus in Jordan, for every economically active person there were about 3.4 dependents. This is a high ratio even when compared with a number of developing countries: amongst the seven developing countries

TABLE XIV: Indices of Dependency in Selected Countries

Country	Year	Economically non-active per 100 active persons	Persons outside working age per 100 persons of working age*	Children under 15 years per 100 of total population
Iraq	1957	151	100	44.8
Iran	1956	212	86	42.2
U.A.R.	1960	233	86	42.9
Morocco	1960	257	94	44.3
Tunisia	1956	185	100	46.6
Jordan	1961	338	99	45.4
Syria‡	1960	342	104	46.3
Germany (FR)	1961	110	49	22.0
Sweden	1960	131	51	22.0
France	1962	136	60	24.8
U.S.A.	1960	157	67	31.1

‡ excluding bedouins. * working age comprises the ages of 15 to 64 years.

Source: Analysis of the Population Statistics of Jordan (Amman 1966), Vol. 1: Third Report, p. 35.

listed in Table XIV only Syria has a comparable high dependency load, which contrasts sharply with countries such as W. Germany (1.1) and Sweden (1.3).

Moreover, the status of the economically active population further reflects the general character of the economy. Whereas in the advanced countries of Western Europe or North America 70-80 per cent of the labour force are employees earning wages and salaries, this proportion of the labour force in Jordan reaches only 55 per cent, reflecting the organizational form of the economic activities of the

country, where independent own-account and family workers still form a significant proportion of the labour force (Table XV).

TABLE XV: Active Population by Status

Economic Status	No. of Persons	Percentage of Total
Employers	14,323	4
Own Account Workers	106,492	27
Employees	215,664	55
Family Workers	26,005	7
Seeking Work	27,320	7
Unclassified	174	-
Total:	389,978	100

Source: First Census of Population and Housing 1961, Vol. 2, p. 10.

We can, furthermore, see that there is quite a high rate of unemployment among that part of the population classified as economically active: those who were seeking work amounted to 7 per cent of the active population. In fact the true rate of unemployment is undoubtedly higher than this as many unemployed people could have been not seeking work, e.g. refugees.

The distribution of the labour force between the various sectors of the economy further reflects the economic structure of the country. More than one third of the economically active population were engaged in work in the agricultural sector of the economy while one fifth were working in manufacturing and construction (Table XVI).

TABLE XVI: Distribution of Economically Active Population by Industry, 1961

Industry	No. of Persons	% of Total
Agriculture	137,757	35.3
Manufacturing (incl. Mining and Quarrying)	41,932	10.8
Construction	40,159	10.3
Electricity, Water, etc.	1,572	0.4
Trade	31, 356	8.0
Transport and Communications	11,899	3.1
Services	53,525	13.7
n.a.d.	71,778	18.4
Total:	389,978	100.0

Source: First Census of Population and Housing 1961, Vol. 2, p. 10.

As we shall see in the relevant part of our study dealing with the structure of the economy in Jordan, the distribution of the labour force amongst the various sectors of the economy differs from that normally found in countries at a comparable stage of development. Although much detail is lost in the group of economically active population "not adequately described"(18.4 per cent of the total), our data can still indicate a lower than expected share of primary activities in employment. As can be seen from Table XVII, the share of primary activities in the labour force in Jordan (37.7 per cent) is surprisingly lower than comparable shares in the Arab countries listed in the Table (53.4 per cent and above). Nevertheless the share of primary activities in employment in Jordan, though lower than

in these developing countries, is still significantly higher than is found in the advanced countries (see Table XVII).

TABLE XVII: Sectoral Distribution of the Economically Active Population, Jordan and other selected countries

Country	Year	Primary*	Secondary‡	Tertiary$	n.a.d.
Jordan	1961	37.7	19.1	24.8	18.7
Syria	1960	53.4	17.8	25.7	3.1
U.A.R.	1960	56.9	11.5	28.8	2.9
Morocco	1960	58.0	10.7	18.1	13.2
Tunisia	1956	69.2	8.5	13.1	9.2
Denmark	1955	22.9	33.0	41.7	2.4
Netherlands	1960	12.2	40.5	46.7	0.5
Sweden	1960	14.5	44.4	40.8	0.3
France	1962	21.5	36.1	38.6	3.8

* Comprises agriculture and related industries and mining and quarrying.

‡ Comprises manufacturing, construction and public utilities.

$ Comprises the remaining sectors of the economy.

Source: Analysis of the Population Statistics of Jordan (Amman 1966), Vol. 1: Third Report, p. 46.

This aspect of the structure of the economy will be further examined in the light of comparative data in the following part of our study. But here it suffices to say that we can obtain an indication of the previously mentioned concentration of non-agricultural activities in the Jordan economy, factors behind which will be investigated in the appropriate part of our study dealing with the structure of the economy.

CHAPTER III

CHAPTER III

PART ONE : THE GROWTH OF PRODUCT AND EXPENDITURE 1954-1966

A. Product

(1) The Rate of Growth of Product

The Jordan economy has passed through a period of swift growth in recent years. Income estimates are available for the period 1954-1966 and reveal that Gross Domestic Product (at current factor cost) has nearly trebled over this twelve-year period, increasing from JD52 million in 1954 to JD150 million in 1966 (Table I). Although no estimates exist for income in constant prices that would enable us to arrive at a rate of growth in real terms, data available in this connection indicate a remarkable stability of prices throughout this period of rapid growth. To start with, the Wholesale Price Index shows that such prices as it covers were towards the end of this period at about the same level as at its outset.

Table II: Amman Wholesale Price Index,* 1954-1965 (1954 = 100)**

1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
100	114	108	106	113	116	126	109	105	116	114	104

* index is the average for "all groups" which comprise:- Cereals and wheat; other foodstuffs; building materials; fuels.

** index is converted from an original base of 1953 = 100 as given in the Statistical Yearbook.

Source: Department of Statistics, Statistical Yearbook, relevant years.

TABLE I: Industrial Origin of Gross Domestic Product 1954-1966
(JD millions† at current factor costs)

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Agriculture	15.84	7.88	20.80	15.38	17.23	15.08	14.62	25.30	20.90	22.08	34.14	34.11	27.65
Manufacturing and Mining (and Electricity)*	3.65	4.52	5.48	5.92	6.61	6.23	6.89	8.83	8.06	10.62	12.53	16.22	17.27
Construction	1.51	1.89	2.14	2.39	3.02	4.66	4.50	4.50	6.15	6.12	5.45	7.87	9.28
Electricity and Water						0.66	0.69	0.67	0.74	0.93	1.03	1.68	2.26
Transport	4.84	6.05	7.48	9.13	9.90	10.70	11.12	12.64	12.53	12.77	12.03	12.60	14.42
Wholesale and Retail Trade (and Banking)** ..	10.79	10.79	12.18	13.92	16.70	18.01	19.57	24.28	23.63	26.43	28.01	31.43	28.92
Banking						0.80	0.87	1.27	1.46	1.35	1.51	2.11	2.77
Ownership of Dwellings	3.45	3.45	4.35	3.65	4.95	6.30	7.13	8.01	8.58	9.39	9.93	10.69	11.20
Public Administration and Defence	8.46	9.02	10.70	12.37	14.51	14.95	15.79	16.74	17.06	17.61	19.70	21.71	22.03
Services	3.90	4.29	3.51	4.81	5.07	7.78	8.26	8.63	9.51	10.37	11.19	12.83	13.94
Total Gross Domestic Product at factor cost	52.44	47.89	66.64	68.57	77.99	85.17	89.44	110.87	108.62	117.67	135.52	150.95	149.74

Sources: 1954-1958 from R.S. Porter, Economic Trends in Jordan 1954-1959 (British Middle East Office, Beirut 1961), p. 1;
1959-1966 from Department of Statistics, The National Accounts 1959-1966 (Amman, n.d.), p. 12. (N.B.: The first series were reconciled to the latter as is explained in the Note at end of Part I of this chapter.)

* Manufacturing and Mining includes Electricity and Water Supply during 1954-1958.

** Wholesale and Retail Trade includes Banking during 1954-1958.

† Until November 1967, when sterling was devalued, by 14%, JD1 = £1.

This index, although covering items that would have considerable relative weight in a more comprehensive index, is far from adequate for our purposes, excluding as it does such important items as housing, clothing and services. However, the absence of a general increase in prices, as is tentatively and partially indicated by these data, is further confirmed by the Cost of Living Index (for Civil Servants) covering the period 1958-1968. Although this cost of living index is for only a small group of the total population it is nevertheless highly significant as it covers, and is given separately for, various income groups of civil servants ranging from less than JD20 per month to JD100 and over.[1]

TABLE III: Cost of Living Index (1968) for Civil Servants by Income Group (1958 = 100)

Income Group JD per month	Cost of Living Index 1968 1958 = 100
less than 20	113.6
20-29.9	114.7
30-39.9	116.7
40-49.9	116.1
50-59.9	116.9
60-69.9	116.5
70-99.9	119.5
100 or more	118.6
All Groups	117.7

Source: Department of Statistics, Family Expenditures and Cost of Living Index for Civil Servants (Amman 1968).

1. Average family size of civil servants included in the survey was found/...

This index covers civil servants living in Amman and shows that their cost of living has been increasing on the average by 1.6 per cent annually during 1958-1968. However, increases in the cost of living of the lower income groups (e.g. 1.3 per cent p.a. for the "less than JD20" group) tend to be less than those for the higher income groups (e.g. 1.7 per cent p.a. for the "JD100 or more" group). This is because the prices of the more basic necessities (e.g. foodstuffs, clothing) in Jordan have been increasing at a slower rate than the prices of relative luxuries (e.g. recreation, reading), and it is the latter group that tends to absorb a relatively larger share of the expenditures of the higher income groups.[1] Thus as far as the increase in the cost of living of the population as a whole is concerned, it would perhaps tend to be nearer to that of the lower income groups having incomes nearer to the average per capita income of the total population. Moreover, one must bear in mind in this connection that this index relates to the cost of living in the capital, Amman, where any price increases tend, if anything, to be higher than those for the country as a whole.

Further investigation of this question of the price level during the period under review would tend to confirm our findings so far

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... found to be 5.9 persons; this gives an average per capita income ranging from JD40 and less to JD200 and over per annum for persons included in the survey. Average per capita income in Jordan was JD76 per annum in 1966 (see Table VI) below).

1. While general cost of living index for all groups stood at 117.7 in 1968 that relating to foodstuffs stood at 114.7; clothing and footwear at 108.6; recreation at 133.3 and other services at 153.1.

which indicate a very mild increase in the price level of the order of 1 to 2 per cent per annum, perhaps nearer the lower range. While factors affecting the price level are more fully investigated in the second part of this chapter, it here suffices to say that whatever forces could, in principle, affect the price level (e.g. the monetary and banking system, public finance, imports) have either abstained from applying any pressures on the price level (e.g. the absence of deficit finance by the Government), or have positively contributed to the maintenance of price stability (e.g. the monetary system with its 100 per cent cover of currency issue; the "free" in-flow of imports in accordance with the forces of the market). Indeed the conditions that led the IBRD mission to assert in 1955 that "it is not possible for aggregate demand to exceed supplies"[1] have held fast ever since, resulting in continuous monetary stability par excellence.

Our foregoing examination of prices should enable us to say something about the growth of domestic product in real terms during this period. Gross Domestic Product (at current factor cost) shows substantial variations in its rate of growth from year to year: on the average, however, it shows a compound rate of growth of about 10 per cent per annum during 1954-1966.

If we assume that prices have been increasing on the average by

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1. IBRD, The Economic Development of Jordan, p. 62.

TABLE IV: Annual and Average Percent Change in GDP (at current factor cost), 1954-1966

Year	GDP (JDm.)	Percent Change
1954	52.44	
1955	47.89	-8.7
1956	66.64	39.2
1957	68.57	2.9
1958	77.99	13.7
1959	85.17	9.2
1960	89.44	5.0
1961	110.87	24.0
1962	108.62	-2.0
1963	117.67	8.3
1964	135.52	15.2
1965	150.95	11.4
1966	149.74	-0.8
	Average Annual Compound Rate of Growth 1954-1956 to 1964-1966	10

Source: Table I.

2 per cent annually,[1] then GDP has been growing in real terms at a rate of 8 per cent per annum during 1954-1966. This rate of growth of real output in fact ranks amongst the highest rates achieved by the developing countries in recent years, as can be seen from data in Table V.

1. This rate exceeds the highest rate of increase as reflected by the index of Table III where the highest increase in the cost of living gives an annual rate of increase of 1.8%; the lowest increase (for the lowest income group) gives a rate of 1.3% and the average gives a rate of 1.6%.

TABLE V: Developing Countries: Rate of Growth of Real Output 1953-1954 to 1962-1964 *

Country ϕ	Rate of Growth in GDP ‡ (% per annum)
Israel	11
Trinidad and Tobago	10
China (Taiwan); United Arab Republic	7
Mexico; Venezuela; Thiland; Iraq; Brazil	6
Panama; Syria; Peru; Iran; Ghana; Costa Rica; Philippines; Burma; Dominican Republic; Sudan; Republic of Korea; Rhodesia and Nyasaland	5
Guatemala; Federation of Malaya; Ceylon; Colombia; Ecuador; India	4
Kenya; Chile; Pakistan; Paraguay; Uganda; Nigeria; British Guiana; Argentina	3
Morocco	1

* minor differences in time period exist.

ϕ countries are arranged in descending order of rates of growth of GDP.

‡ rates of growth in GDP refer to annual compound rates between biennial averages at the beginning and end of the period.

Source: U.N., World Economic Survey 1965 (New York 1966) Part I, P. 15.

The rate of growth of real output which we have obtained for Jordan (8 per cent) comes third if compared with rates achieved in the thirty-six countries for which data are shown in Table V. To be sure this relatively high rate of growth of GDP which was maintained in

Jordan during the twelve-year period under review (1954-1966) has resulted in a doubling of per capita income during this relatively short period (Table VI), and in spite of the rapid growth of population.

TABLE VI: Per Capita Gross Domestic Product, 1954-1966

Year	GDP JDm.	Population (000)	GDP Per Capita	
			JD	Index (1954 = 100)
1954	52.44	1,395	37.6	100
1955	47.89	1,437	33.3	89
1956	66.64	1,482	45.0	120
1957	68.57	1,527	44.9	119
1958	77.99	1,580	49.4	131
1959	85.17	1,605	53.1	141
1960	89.44	1,655	54.0	144
1961	110.87	1,706	65.0	173
1962	108.62	1,757	61.8	164
1963	117.67	1,810	65.0	173
1964	135.52	1,864	72.7	193
1965	150.95	1,920	78.6	209
1966	149.74	1,978	75.7	201

Source: GDP data already given; population for the period 1954-1958 from U.N., Economic Developments in the Middle East 1958-1959 (New York 1960), p. 125. For subsequent years figures are based upon findings of First Census of Population and Housing, op. cit., for the year 1961 (figures for the two preceding years to 1961 and for subsequent years are estimated through applying a 3% annual rate of increase to the figure of 1961).

Thus per capita GDP has increased from about U.S. $98 during 1954-1955 to about $215 by 1965-1966 thus pushing the level of income

in Jordan beyond the lowest levels found in the less developed countries (e.g. $47 in Ethiopia and $41 in Malawi in 1965), although it remains quite low compared with levels that prevail in the advanced countries (e.g. $2155 in Canada and $3210 in the U.S.A. in 1965).[1]

Having seen the rate of growth of GDP and the growth of per capita product we next examine in more detail the growth of GDP during our period.

(2) Fluctuations in the Growth of Product

One of the more readily apparent features of this rapid growth is the fluctuation that occurs in its upward trend. Indeed, while GDP has been growing during 1954-1966 at the high average rate of 10 per cent per annum (Table IV), during seven out of these twelve years it shows a below-average growth (even declining in three years: 1955, 1962 and 1966). In contrast, in other years, GDP registered tremendous jumps (e.g. increasing by 39 per cent and 24 per cent during 1956 and 1961 respectively). What is behind this seemingly erratic fluctuation in the rate of growth of output during this period? In examining this point, let us look more closely at the performance of the various sectors of the economy in these years.

If we group the different sectors of the economy into primary

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1. Per capita GDP figures from U.N., Yearbook of National Accounts Statistics 1966, (New York 1967), pp. 725-729.

(agricultural), secondary (manufacturing and construction) and tertiary activities (comprising the remaining sectors considered as concerned with services), then we can see that while the secondary and tertiary sectors register increases (of varying extent) in their output in every year, agricultural output in contrast exhibits tremendous variations in its performance (Table VII). In seven out of the twelve years under consideration agricultural output registers a decline: and these years were the same ones during which total GDP either declined or increased at a below-average rate (1965 is the only year during which total GDP increased by more than the average rate while agricultural output declined: however, during that year agricultural output declined only very slightly having increased substantially in the preceding year).

TABLE VII: Annual Percentage Change in Gross Domestic Product: Primary, Secondary, Tertiary and Total, 1954-1966

Year	Total GDP	Primary	Secondary	Tertiary
1955	-8.7	-50.3	24.2	6.9
1956	39.2	164.0	18.9	13.8
1957	2.9	-26.1	9.1	17.4
1958	13.7	12.0	15.9	13.9
1959	9.2	-12.5	13.1	15.8
1960	5.0	-3.1	4.6	7.1
1961	24.0	73.1	17.0	13.9
1962	-2.0	-17.4	6.6	1.8
1963	8.3	5.6	17.8	7.3
1964	15.2	54.6	7.4	5.8
1965	11.4	-0.1	35.0	11.2
1966	-0.8	-18.9	10.2	3.0

Source: computed from Table I.

Here it becomes quite clear that it is the unsteady performance of the agricultural sector that imparts fluctuations to the upward trend of total GDP. Indeed, the correlation coefficient of annual percentage changes in GDP on annual percentage changes in agricultural output during 1954-1966 comes to 0.95. The relative expansion that occurred in the various sectors in accordance with these varying rates of growth illustrates further this point (Table VIII).

TABLE VIII: Index of Growth of Total and Sectoral Gross Domestic Product, 1954-1966

Year	Total GDP	Primary	Secondary	Tertiary
1954	100	100	100	100
1955	91	50	124	107
1956	127	131	148	122
1957	131	97	161	143
1958	149	109	187	163
1959	162	95	224	186
1960	171	92	234	200
1961	211	160	271	228
1962	207	132	290	232
1963	224	139	342	248
1964	258	216	368	262
1965	288	215	499	290
1966	286	175	558	297
Average annual %age growth *-	10.1	8.0	14.4	10.0

Source: Computed from data in Table I.

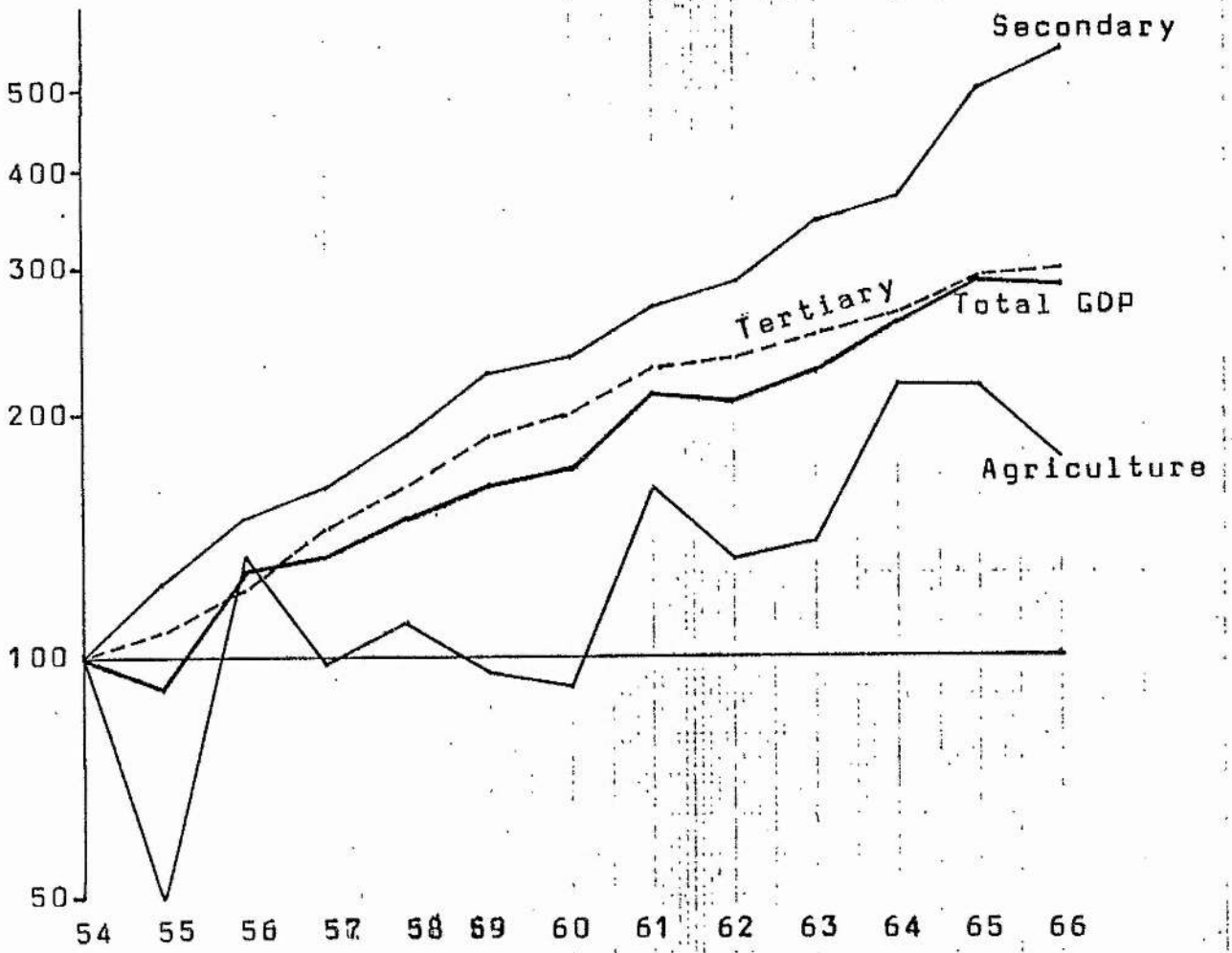
* compound annual growth 1954-1956 to 1964-1966.

Figure 1, showing the indices of Table VIII, depicts vividly how the upward trend of total GDP fluctuates in reflection of the sharp fluctuations that occur in agricultural output. It can be seen in addition, and as is expected in the process of development, that the agricultural sector grows by relatively less than the other sectors: while the secondary and tertiary sectors grow annually by 14 per cent and 10 per cent respectively, agriculture grows at 8 per cent per annum. What also attracts our attention here is that during the earlier part of our period and up to 1961 agricultural output registers hardly any growth at all while the other sectors exhibit a sustained upward trend throughout the period. What is the significance, if any, of such differing sectoral trends? In order to examine this question we need to have a closer look at the performance of the various sectors of the economy.

(3) Sectoral Growth

(a) Primary. - In the course of development, as we have just stated, the output of the agricultural sector expands by relatively less than the output of the other sectors. This is a reflection of the structural transformation that occurs in the process of development through which the relative share of the agricultural sector in, amongst other things, total output is reduced. However, the agricultural sector must, if it is not to hinder, let alone assist, the overall growth of the economy, expand its output sufficiently to meet the increase in demand for its products that is generated through population

Figure 1: Indexes of Primary, Secondary, Tertiary And Total GDP, 1954-1966 (1954=100)



Source; Table VIII

increase and the growth of real per capita income. In fact, an agricultural transformation which, through rising productivity, adequately increases the supply of food and simultaneously releases resources required for the expansion of the other sectors, is considered to be a main prerequisite of economic development.

Although trends in the agricultural sector during this period will be analysed separately in the thesis, what is necessary for our purposes here is to focus our attention on how certain exogenous factors relaxed the normally strict and extensive demands imposed upon the agricultural sector in the achievement of rapid growth. Sectoral inter-dependence was accordingly so reduced as to permit a large measure of sectoral "tolerance" or imbalance, thus resulting in a seemingly reversed sequence of growth. More specifically, the import surplus and the pool of unemployed labour amongst the refugees helped to make good whatever shortcomings (or satisfy would-be constraints) resulting from any inadequacy in the performance of the agricultural sector for the rapid growth occurring in the other sectors. Let us see what in actual fact did happen.

Agriculture in Jordan is heavily dependent upon rain, and droughts occur repeatedly resulting in drastic reductions of agricultural output. This factor of fluctuating rainfall, as we shall see in the chapter dealing with Agriculture, accounts for the fluctuations in agricultural production which we have noticed earlier on. An adverse rainfall cycle veiled whatever developments occurred in the agricultural sector in the earlier part of our period, resulting in

an apparent stagnation of this sector. While the demand for food was growing by about 6 to 7 per cent per annum[1] agricultural output shows hardly any growth during 1954-1960 (its index stood at an average of 97 during this period compared with 100 in 1954: see Table VII). Such inability to increase the supply of food to meet an increasing demand would have seriously constrained the overall growth of the economy had it not been for the ability of imports to fill the gap, thanks to the substantial import surplus. During this period imports of foodstuffs more than doubled, and it must be emphasized that such a rapid increase in imports would not have been possible in the absence of substantial foreign transfers which financed the import surplus, as will be seen in the relevant part of the thesis dealing with foreign trade and the balance of payments. In this connection, perhaps it ought to be said that a chronic "food gap" was already in existence prior to 1954. While before 1948 Jordan tended to be on the average a net exporter of foodstuffs,[2] the upheavals of 1948 dramatically reversed this position. With refugees making up about one third of the total population, and the loss of nearly one half of the agricultural lands of the frontier villages of the west bank,[3] a severe food

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1. This rate of increase in the demand for food is estimated in the chapter dealing with Agriculture.

2. While between 1937 and 1943 imports of foodstuffs increased from about £(Palestinian)300,000 to about £P400,000 (£P1 = JD1), exports of foodstuffs increased from about £P400,000 to over £P1,500,000. See A. Konikoff, Transjordan: An Economic Survey, Economic Research Institute of the Jewish Agency for Palestine (Jerusalem 1946) pp. 111-112.

3. It has been calculated that frontier villages in districts where more/...

shortage could be immediately relieved only through the large-scale import of foodstuffs which was made possible through foreign assistance. However, other than this initial and chronic "food gap" a new and rapidly expanding one started to emerge by the mid-fifties as a result of the inability of the agricultural sector to keep pace with the rapidly increasing demand for its products. This increase in demand was not only generated through a rapidly increasing population (2.8 per cent per annum) but also through the growth of per capita income resulting from the rapid expansion of secondary and tertiary activities (14 per cent and 10 per cent per annum respectively).

However, from 1961 onwards the agricultural sector becomes more successful in meeting the rising demand for its products, and food-stuffs imports show hardly any increase in spite of the continuation of the 6 to 7 per cent annual increase in demand for food. The tremendous expansion of agricultural output is indicated by the fact that domestic agriculture was able to satisfy such a high rate of increase in demand, and the index of agricultural production rises to 173 during 1961-1966 as compared with 100 in 1954 and 96 during 1954-1960 (Table VII). This substantial expansion of agricultural production was brought about through the completion of various developments in this sector, (such as those in the Jordan Valley, which in the

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... more than one quarter of the total population of the west bank were living prior to 1948, lost 46 % of their lands as a result of the demarcation of the armistice line between Jordan and Israel after 1948 (R.S. Porter, Economic Survey of Jordan, p. 16).

earlier period were being put into effect) which were fortuitously coupled with a favourable rainfall cycle. To be sure the "food gap" still persists during this period, but it is prevented from growing.

While the import surplus thus assisted the agricultural sector in meeting the increase in the demand for food while agricultural improvements were being carried out, the large pool of refugees similarly supplemented the agricultural sector in supplying resources required for the expansion of secondary and tertiary activities: the refugees' supply of labour, skills, entrepreneurial abilities (and even capital initially) were successively absorbed in accordance with the "conditions of the market."[1] It is worth remembering in this connection that as we saw in the first chapter, long before 1948 (during the Mandate and even before), the expansion of not only the non-agricultural sectors but also of the agricultural sector itself was substantially assisted through the inflow of such resources from the neighbouring countries and especially from Palestine. However, the events of 1948 dramatically modified and accelerated this process.

Having briefly examined the significance and implications of the trends exhibited by the agricultural sector in its growth, let us now proceed to have a look at the growth of the secondary and tertiary sectors.

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1. One can even say that their absorption went beyond the level permitted by the free interplay of the forces of the market: wages after 1948 fell drastically and the continued assistance received by the refugees from the international organizations enabled them to work at/...

(b) Secondary. - We saw earlier on (Table VIII) that manufacturing (including mining and electricity) and construction have shown the largest relative expansion in their output amongst the various sectors. While in our above examination of agriculture we touched upon some of the factors that have facilitated the expansion of secondary and tertiary activities, we will here look at the forces causing such rapid growth.

As far as manufacturing[1] is concerned, two main factors have been behind its growth since 1948. Firstly, what might be considered a shift in the geographical location of Palestinian Arab manufacturing industry occurred as a result of the events of 1948. Prior to 1948, both the east and the west banks relied upon Palestinian industry located along the coastal strip for the supply of an important part of their demand for manufactures. Palestinian manufacturing (both in the Arab and Jewish sectors) became in fact during the Mandate relatively much more developed than in any of the neighbouring countries: this was especially true in the case of Jordan which, having special links with Palestine, specialized in agriculture exchanging its products for manufactures, a substantial part of which came from Palestinian industry. The coastal strip along which most of this industry was

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... at a less than "subsistence" wage level. See IBRD, The Economic Development of Jordan, p. 46 fn. and pp. 450-453 - wage rates in the west bank in 1951 were on the average equal to only one third of their original level in 1947 for the Arab daily paid workers in Palestine.

1. Similarly to Agriculture, Manufacturing is analysed separately later in the thesis. The following discussion is based on the findings of that analysis.

located became part of Israel thus causing the disappearance of such a source of supply of manufactures not only to the east bank but also to the west bank. This development coupled with the influx of part of the labour and skills employed in the Palestinian industry resulted in the setting up of numerous enterprises to replace previous sources of supply, especially as the demand for manufactured items was high and increasing.

The second factor behind the swift growth of manufacturing was the import substitution that became increasingly feasible with the continued growth of the market. Whatever "protection" resulted from the increased transport cost of imports as a result of the severance of the direct Mediterranean route was enhanced by the government's policy of stimulating the development of import-substituting industry to meet the demands of a rapidly growing market for manufactures. Between 1954 and 1966 value added in the manufacturing sector increased by more than five-fold, exhibiting an average rate of growth of 14 per cent per annum (Table IX).

As far as the Construction sector is concerned, it shows a rate of growth even higher than that of manufacturing: value added in construction increased by more than six-fold, showing an average annual rate of growth of 15 per cent during 1954-1966. In the process of economic development, the construction sector tends to show the largest relative growth amongst all the sectors of the economy: this is only to be expected as development in any sector touches upon the construction sector, and the Jordan economy is no exception in this

TABLE IX: Index of Growth of GDP Originating in Secondary Sectors 1954-1966

Year	Manufacturing *	Construction
1954	100	100
1955	124	125
1956	150	142
1957	162	158
1958	181	200
1959	189	309
1960	208	298
1961	260	298
1962	241	407
1963	316	405
1964	372	361
1965	490	521
1966	555	615
Average percentage rate of growth 1954-56 to 1964-66:-	14%	15%

Source: Computed from Table I.

* includes mining and electricity and water supply.

regard. However, two main factors have especially stimulated the growth of activity within this sector. Both of these factors stem in fact from the loss of much "infrastructure" both public and private as a result of the events of 1948, thus necessitating an enhanced expansion of activity within this sector. Firstly, Jordan suddenly found itself without its basic transport infrastructure: not only did the east-west oriented road system become of limited value after the

severance of the Mediterranean route, but also the country suddenly was without any port facilities. The Port of Aqaba had to be developed rapidly; the Amman-Aqaba desert road had to be built. To this could be added the infrastructure of public facilities (schools for example) which one third of the population suddenly found itself without. All these factors added weight to the "normal" requirement of developing, rather than building from scratch, so to speak, the infra-structure necessary for economic development.

In addition to this factor, which manifested itself in an increased expenditure by the government on public constructions and works, there was a second factor that helped to augment the expansion in construction activities. This concerned the private, rather than the public, sector as a result of the severe housing shortage resulting from the sudden influx of refugees whose numbers equalled one half the existing settled population. This factor put added pressure on the housing conditions of the country. Total fixed capital formation in construction and works increased by more than five-fold during 1954-1966 from JD3⅓ million in 1954 to JD20 million in 1966, most of this being accounted for by "dwellings" and "public construction and works", with the latter expanding very rapidly towards the end of our period as we shall see later on in this part of our study when we examine capital formation and its distribution. The following details of value added in the construction sector are available for the years 1959-1966, and they serve to indicate the major rôle played by public construction in expanding the value added within this sector.

TABLE X: Value Added in Construction, 1959-1966 (JD million)

	1959	1960	1961	1962	1963	1964	1965	1966
1. Private building	2.07	2.21	1.87	2.22	2.70	2.61	2.78	2.70
2. Private building maintenance	0.15	0.18	0.20	0.21	0.23	0.25	0.27	0.28
3. Government construction	2.33	2.07	2.37	3.64	3.16	2.56	4.80	6.26
4. UNRWA construction	0.11	0.04	0.06	0.08	0.03	0.03	0.02	0.04
Total:	4.66	4.50	4.50	6.15	6.12	5.45	7.87	9.28

Source: Department of Statistics, The National Accounts 1959-1966 (Amman, n.d.), p. 38.

Having examined trends in the secondary sectors we next turn to trends in tertiary activities.

(c) Tertiary. - The remaining sectors of the economy which are based upon the provision of services rather than material product show an average rate of growth of 10 per cent per annum during 1954-1966, which is the same as the rate of growth of total GDP (Table VIII). However, when we look at the various sectors within this group of activity we find that they exhibit differing trends which, upon closer examination, are found to reflect the particular conditions prevailing in the Jordan economy.[1]

1. This point regarding trends in the various tertiary sectors is further examined in this part of our study: see pp. 84-87 below.

TABLE XI: Index of Growth of GDP Originating in Tertiary Sectors (1954-1966)

Year	Transport	Commerce*	Ownership of Dwellings	Public Admin. & Defence	Services
1954	100	100	100	100	100
1955	125	100	100	107	110
1956	155	113	126	126	90
1957	189	129	135	146	123
1958	205	155	143	172	130
1959	221	174	183	177	199
1960	230	189	207	187	212
1961	261	237	232	198	221
1962	259	233	249	202	244
1963	267	257	272	208	266
1964	249	274	288	233	287
1965	260	311	310	253	329
1966	298	294	325	260	357
Annual Rate of Growth:-‡	7.8%	10.9%	11.0%	8.4%	12.5%

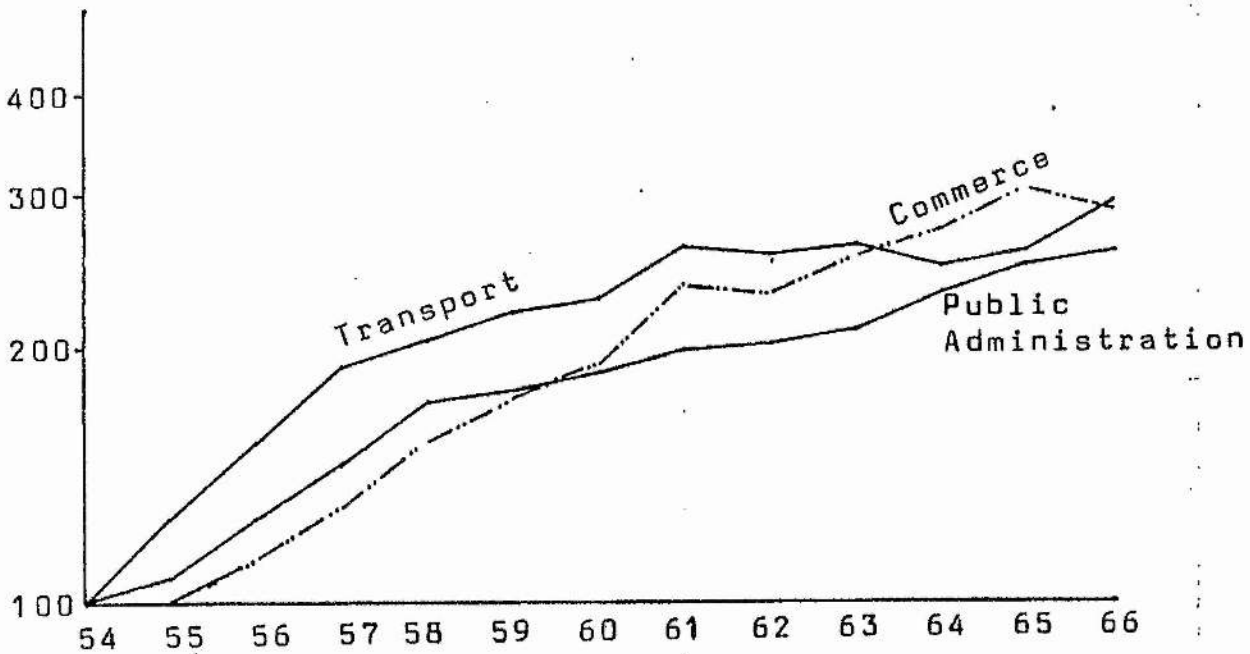
Source: Computed from data in Table I.

* comprises Trade and Banking.

‡ compound rate of annual growth between 1954-1956 and 1964-1966.

While value added in the transport sector shows the lowest average annual rate of growth (7.8 per cent) amongst the five tertiary sectors, it in fact shows the swiftest growth initially (see Fig. 2). Severe shortages within this sector resulting from the sudden increased demand for transport services after 1948 resulted in a substantial initial growth of activity within this sector. The sudden and large increase in population ~~in~~ which the events of 1948 precipitated, and

Figure 2: Index of GDP Originating in Transport, Commerce and Public Administration, 1954 - 1966 (1954 = 100).



Source: Table XI.

the rapid growth of imports that followed plus the increased demand for transport services that normally accompanies the overall growth of economic activity, were all behind the high level of demand for transport services. Accordingly and as we shall see later, investment in transport equipment shows a rapid growth from 1954 up to 1959, after which it shows signs of levelling off. The transport system that was developed in Jordan was almost completely dependent upon road transportation, and the major part of the investment in transport equipment was in various types of road vehicles. And as pointed out in the National Accounts,[1] the estimate of the value added within this sector is heavily weighted by the number of vehicles in operation which after 1961 does not show much increase until 1966, when a rapid growth in the number of passenger vehicles occurs. In fact the initial profitability of transport services stimulated a high level of investment in equipment as this sector was almost completely organized on a private enterprise basis. For example by the early sixties, and as a result of excess capacity in the road haulage sector, goods transport from Aqaba to Amman had to be rationed amongst the various truck operators. The roughly constant level of value added in the transport sector as a whole during the sixties and up to 1966 is in fact largely a reflection of the "excess capacity" that developed within this sector in response to initial shortages. During the

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1. See National Accounts 1959-1966, pp. 39-41, where it is pointed out that the number of licensed vehicles is the main indicator for the estimation of value added in this sector.

sixties accordingly, the increased demand for transport services that accompanied the continued growth of general economic activity was met through a fuller utilization of capacity within this sector rather than through its expansion. The following details of the value added within this sector are available for the years 1959-1966.

TABLE XII: Value Added in Transport, 1959-1966 (JD million)

	1959	1960	1961	1962	1963	1964	1965	1966
Rail transport	0.22	0.19	0.17	0.17	0.18	0.18	0.16	0.11
Road transport:								
(a) Goods	4.10	4.20	5.17	4.99	4.86	4.30	4.68	4.74
(b) Passengers	5.28	5.48	5.81	5.73	5.89	5.84	5.91	7.50*
Air transport	0.12	0.14	0.20	0.24	0.27	0.35	0.30	0.43
Aqaba Port activities	0.27	0.30	0.33	0.40	0.43	0.45	0.48	0.41
Lighterage	0.39	0.46	0.49	0.44	0.48	0.10	0.11	0.10
Travel agencies	0.32	0.35	0.47	0.56	0.66	0.81	0.96	1.13
Total:	10.70	11.12	12.64	12.53	12.77	12.03	12.60	14.42

Source: The National Accounts 1959-1966, p. 41.

* as is pointed out in the National Accounts, the number of taxi cars has risen from 2729 in 1965 to 3305 in 1966 (i.e. an increase of 23%).

As far as the other tertiary sectors are concerned, value added in commerce and in ownership of dwellings seems to grow at a slightly faster rate than the growth of total GDP during our period. The position of the commercial sector in the Jordan economy will be examined later on in this part of our study when we look at the question of the

economic structure during our period. As far as value added from ownership of dwellings is concerned, increased urbanization has been behind its rapid growth as we can see from Table XIII, which gives relevant details for the years 1959-1966.

TABLE XIII: Value Added from Ownership of Dwellings, 1959-1966
(JD million)

	1959	1960	1961	1962	1963	1964	1965	1966
Imputed net rents for 16 largest towns	2.98	3.38	3.97	4.25	4.95	4.95	5.34	5.67
Adjustment for underassessment	1.49	1.69	1.98	2.12	2.29	2.48	2.67	2.83
Imputed net rents for remaining municipalities	0.20	0.23	0.23	0.25	0.28	0.31	0.42	0.37
Imputed net rents in rural areas	1.63	1.83	1.83	1.96	2.23	2.19	2.26	2.33
Total:	6.30	7.13	8.01	8.58	9.39	9.93	10.69	11.20

Source: The National Accounts 1959-1966, p. 45.

Value added in the public administration and defence sector is of course dependent upon the growth of the activity of the government. The position that this sector has occupied in the structure of the economy will be discussed later on in this part of our study and of course factors affecting activity within this sector are examined in connection with our analysis of Public Finance in due course. As far as value added in services is concerned, the rapid expansion in such items as education, health, tourism (hotels, cafés and restaurants)

has been behind the rapid growth of income originating in this sector. Table XIV gives us details of these and other items within the services sector during the years 1959-1966.

TABLE XIV: Value Added in Services, 1959-1966 (JD million)

	1959	1960	1961	1962	1963	1964	1965	1966
Education services*	3.19	3.43	3.66	4.05	4.50	4.89	5.51	5.95
Health services‡	0.90	1.03	1.11	1.25	1.49	1.45	1.62	1.89
Other UNRWA services	0.77	0.82	0.82	0.83	0.83	0.84	0.87	0.89
Recreation (cinemas)	0.20	0.21	0.24	0.24	0.24	0.26	0.26	0.26
Film distribution	0.09	0.10	0.11	0.12	0.14	0.13	0.14	0.13
Domestic services	0.46	0.47	0.52	0.53	0.53	0.53	0.55	0.55
Hotels, cafés and restaurants	0.99	0.96	0.88	1.11	1.13	1.38	1.89	2.09
Laudries, Barbers and photographers	0.28	0.29	0.28	0.30	0.34	0.40	0.42	0.59
Other professional services ϕ	0.41	0.42	0.43	0.46	0.50	0.56	0.73	0.69
Religious institutions	0.12	0.12	0.15	0.15	0.15	0.20	0.25	0.27
Tourist guides	0.04	0.05	0.05	0.06	0.10	0.10	0.11	0.13
Public accountants	0.08	0.09	0.09	0.10	0.10	0.11	0.12	0.13
Sign-makers	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.04
Other services	0.23	0.24	0.26	0.27	0.28	0.30	0.32	0.33
Total:	7.78	8.26	8.63	9.51	10.37	11.19	12.83	13.94

Source: The National Accounts 1959-1966, p. 49.

* includes government, UNRWA, and private education services.

‡ includes government and private health services.

ϕ includes lawyers, engineers and clearance companies services.

Now in order to put into proper perspective the growth of the various sectors which we have just briefly reviewed, we need to examine their respective relative positions in the economy as a whole. To be sure, our preceding brief examination of sectoral growth no more than prepares the ground for an adequate analysis of growth in the Jordan economy through considering the all-important question of the structure of the economy during the period under review.

(4) Economic Structure

(a) Product Shares. - Data in Table I can be utilized to reveal the relative contribution of the various sectors to total output.

TABLE XV: Percentage Shares of Primary, Secondary and Tertiary Sectors in Gross Domestic Product, 1954-1966

Year/ Period	Primary (A)	Secondary (M)	Tertiary (S)
1954	30.2	9.9	59.9
1955	16.5	13.4	70.1
1956	31.2	11.4	57.4
1957	22.4	12.1	65.5
1958	22.1	12.4	65.5
1959	17.7	13.6	68.7
1960	16.3	13.5	70.2
1961	22.8	12.7	64.5
1962	19.2	13.8	67.0
1963	18.8	15.0	66.2
1964	25.2	14.0	60.8
1965/...			

(Table XV, cont.)

Year/ Period	Primary (A)	Secondary (M)	Tertiary (S)
1965	22.6	17.0	60.4
1966	18.5	19.2	62.3
Average 1954-1960	22.4	12.3	65.3
" 1961-1966	21.2	15.3	63.5
" 1954-1966	21.8	13.8	64.4

Source: Computed from data in Table I.

It is normally held that economic structure is a function of the level of development: in the course of development the secondary (M) and tertiary (S) activities expand their relative shares of, amongst other things, total product at the expense of agriculture (A), which shows a declining relative share. Empirical studies, leading amongst which is that of Professor Kuznets, support the validity of this hypothesis, especially as far as the relative shares of the A and M sectors are concerned (see Table XVI).

The data set out in Table XVI reveal quite clearly the negative association between the level of per capita income (which is utilized as a measure of the level of development) and the share of the A sector, as well as the positive association between income level and the share of the M sector. The share of the S sector, however, shows a much narrower range of variation, and exhibits significant positive association with the level of income only in respect of movements from groups VI and VII on the one hand to classes I to V on the other.[1]

1. Professor Kuznets puts forward a number of reasons for the more limited/...

TABLE XVI: Sectoral Percentage Shares in National Product,* Countries Grouped by Per Capita Product, Recent Years‡

Groups of Countries by Per Capita Product ø	Product Share §		
	A	M	S
	(Percentage of National Product)		
I	13.2	38.1	48.7
II	17.2	41.5	41.2
III	19.2	29.2	51.6
IV	30.1	24.2	45.7
V	35.4	24.3	40.2
VI	42.5	17.8	39.3
VII	54.6	13.7	33.3
V, VI and VII	45.6	17.9	37.2

* concept employed varies from country to country: gross domestic product, net domestic product, gross national product are variably used. See appendix tables in source.

‡ circa 1950.

ø countries are grouped in descending order of per capita income. Index for each group as expressed in terms of 100 for group VII is: I = 1700; II = 1,000; III = 650; IV = 400; V = 270; VI = 200. In absolute terms class VII has an average per capita product of $U.S. 60-70. In all about sixty countries are included in this cross-section.

§ unweighted arithmetic means of the product shares of individual countries in each group.

Source: Simon Kuznets, "Quantitative Aspects of the Economic Growth of Nations: II. Industrial Distribution of National Product and Labour Force," Economic Development and Cultural Change, V, Supplement to No. 4 (July 1957), p. 10.

... limited association between per capita income and the product share of the S sector: the lesser susceptibility of services to movements through international trade thus resulting in a high lower limit for their share; the replacement of certain types of services/...

Now if we try to examine our data of the Jordan economy in the context of this international cross-section we obtain some interesting results. Jordan starts at the outset of our period (i.e. 1954) with a level of per capita product nearer to the lowest group (VII) and moves by the end of our period nearer to Group V. However throughout 1954-1966 its economic structure exhibits characteristics of the much higher income groups in some respects, while in other respects its economic structure conforms to its own class. Thus throughout 1954-1966 the share of the A sector in the Jordan economy (21.8 per cent) comes nearest to that found in the case of Group III (19.2 per cent). Similarly, the share of the S sector throughout 1954-1966 exceeds the average of the highest income level group (see Tables XV and XVI). It is only in respect of the share of the M sector that the structure of the Jordan economy seems to conform to its own group. What are the causes and significance of this seemingly "contradictory" economic structure?

(b) Employment Shares. - Before going into this question one ought to perhaps investigate the structure of the economy from another angle: the employment share. The distribution of the labour force amongst the various sectors of the economy has been found to reflect more vividly the normally assumed relationships between structure and

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... services found in poor countries (e.g. religious services, domestic servants, fortune-tellers) by other services in the course of development (e.g. professional services, recreation, education); relative price movements in the course of development. See Kuznets, op. cit., pp. 14-15.

the level of income. This is especially important as far as the S sector share is concerned whose relationship with the level of income, as we saw in Table X, was not reflected, as one would expect to see, in terms of product shares. Let us first look at the data for Jordan and then see how it compares with any international findings.

When we try to investigate the structure of the Jordan economy in terms of employment shares, we come up against a difficulty of some lack of refinement in the available data. However, as will be found upon closer examination, this lack of refinement can be overcome without much loss of significance. These data are available from the Population Census of 1961 and the difficulty arises from the somewhat large ratio of the labour force not being adequately classified as we saw earlier on in Chapter II (Table XVI).

TABLE XVII: Percentage Shares of Primary, Secondary and Tertiary Sectors in Labour Force, 1961

	Primary (A)	Secondary (M)	Tertiary (S)	n.a.d.
adjusted *	35.3 (43.3)	21.5 (26.3)	24.8 (30.4)	18.4

Source: Chapter II, Table XVI (P. 38 supra).

* see explanation hereunder.

Now these data can be looked upon from a number of angles. The first fact to be noted is that among the large group of 18.4 per cent

not classified are included members of the armed forces for whose occupation no civilian equivalent could be found. Such a group, which undoubtedly makes up a substantial part of this 18.4 per cent, would, strictly speaking, fall under S sector share. Thus if we leave out this unclassified group and obtain the relative shares of the various sectors only among the classified labour force then, if anything, there is a tendency for the share of the S sector to be understated, while the shares of the other two sectors, and especially that of the M sector, become overstated. However the point to be stressed here is that, as we shall see presently, no matter how we look at these data, there is a significant tendency for confirming our findings in respect of the structure of the economy in terms of product share. In order to see this, let us now look at an international cross-section of labour force shares which is found in our previous source of product shares.

When we evaluate employment data for Jordan in the context of this international cross-section (Table XVIII) we find that while its per capita output puts it amongst Groups V-VII its employment structure comes nearest to the averages of Groups III and IV. This is true for whichever way we look at our employment data for Jordan: there is a clear tendency for the A sector share to be substantially lower than is found for Groups V-VII as well as a tendency for the shares of the M and S sectors to be higher than is found in the relevant group within which Jordan falls in terms of its per capita income.

TABLE XVIII: Sectoral Percentage Shares in Labour Force,* Countries Grouped by Per Capita Product, Recent Years‡

Groups of Countries by Per Capita Product ø	Employment Share §		
	A	M	S
	(Percentage of Labour Force)		
I	15.0	40.2	44.8
II	31.1	31.0	37.9
III	29.4	28.3	42.4
IV	58.8	17.5	23.7
III and IV	46.2	22.1	31.7
V	54.5	18.9	26.6
VI	64.8	15.0	20.2
VII	79.9	6.6	13.5
V, VI and VII	67.0	13.3	19.7

* including unpaid family labour (the same as comparable data already presented for Jordan).

‡ circa 1950.

ø same classification as explained in notes to Table XVI. Forty-seven countries are here included.

§ unweighted arithmetic means of the employment shares of individual countries in each group.

Source: Simon Kuznets, op. cit., p. 23.

Now if we combine both our findings in respect of the structure of the Jordan economy (in terms of both product and employment), we can say that there seems to be a concentration of non-agricultural activities in the Jordan economy. This is especially evident in respect of the tertiary sectors which show an employment and product share much above the average found in countries of a comparable income

level. Secondary activities, on the other hand, show an above-average share only in terms of employment, their product share being about average. In order to relate our findings in this respect to the pattern of growth of the economy (which we have investigated earlier on) we need of course to examine the causes of this services-oriented skew in the structure of the economy.

(5) Causes of Excess of Tertiary Activities

We have seen that in terms of product-shares the conspicuous feature of the structure of the Jordan economy is the much-above-average share of the S sector. The M sector share seems to be about average whereas the A sector appears to have a share much below average. Now we can approach our task of investigating the causes of this excess of services by asking the following question: If the domestic product "basket" is thus heavily weighted by services how is this basket then modified to conform with the demand pattern that is found in Jordan and which is heavily weighted by basic necessities of food and clothing? As we shall see later on in this part of our study the consumption expenditure in Jordan, as one would expect, reveals a heavy share of basic commodities like food and clothing in contrast to the demand patterns of higher income countries where luxuries and semi-luxuries account for steadily higher shares in accordance with the increase in per capita income. What we here want to know is how the discrepancy between domestic production and domestic consumption patterns was reconciled. The obvious means through which any economy can adjust

its product-mix to conform to its demand pattern is through the exchange of such products made possible by international trade.

International trade can result in varying degrees of specialization in production in the participating countries. Specialization in the provision (or export) of services is not unknown: countries like Switzerland and Lebanon are examples.[1] Such a specialization would evidently result in an expansion of the S sector beyond what would have been possible in the absence of trade. If we examine the position of Jordan in this respect we can find a certain degree of such specialization as indicated by an excess of services exports over services imports. (See Table XIX).

The growth of tourism, especially in more recent years, and the services provided through international institutions, play their part in an increasing export surplus of services as can be seen from the above figures. Not only did net exports of services increase by over six-fold during 1954-1966 but their ratio to GDP nearly doubled from an average of about 4 per cent in 1954-1956 to 7 per cent in 1964-1966. Such an export surplus of services can indicate one possible cause of the excess share of services in the structure of

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1. It is of significance that Lebanon is among the only three developing countries, in Kuznets' Appendix Table 3 (in the source quoted for Table XVIII) covering 64 countries, which show a product share of the S sector comparable to that found in our data for Jordan: the product share of the S sector in Lebanon is given as 64.1%; in Israel 60.8% and in Puerto Rico 63.6%. More will be said about the experience of other countries in this respect (p. 82 below).

TABLE XIX: Services Exports, Imports, Net Exports and Ratio of Net Exports to Gross Domestic Product, 1954-1966

Year	Exports	Imports	Net Exports	Net Exports/GDP
	JDm.	JDm.	JDm.	%
1954	3.0	1.2	1.8	3.4
1955	3.7	1.5	2.2	4.6
1956	4.2	1.6	2.6	3.9
1957	5.2	2.6	2.6	3.8
1958	6.4	2.7	3.7	4.7
1959	8.7	3.2	5.2	6.1
1960	8.8	4.3	4.5	5.0
1961	11.7	4.9	6.8	6.1
1962	13.2	6.9	6.3	5.8
1963	13.7	7.4	6.3	5.4
1964	15.8	7.3	8.5	6.3
1965	18.6	7.7	10.9	7.2
1966	21.7	9.3	12.4	8.3

Source: See Balance of Payments data, Chapter VI p. 272 for further details. Figures based on National Accounts items for "travel" and "other services".

the economy. However, as we shall see presently, such a specialization comes nowhere near accounting fully for the substantial extent of concentration in services which we have seen. There is another factor which has been much more instrumental in causing the excess of services in the economy.

While the balance of trade in services seems to indicate one possible cause of concentration, one must not neglect the possible effect of the other side of the coin, so to speak: the balance of trade in goods.

TABLE XX: Balance of Trade in Goods and Ratio of Deficit to Gross Domestic Product, 1954-1966

Year	Exports *	Imports ‡	Deficit	Deficit/GDP
	JDm.	JDm.	JDm.	%
1954	3.1	18.6	15.5	29.6
1955	3.6	25.3	21.7	45.3
1956	5.2	24.6	19.4	29.1
1957	5.5	29.8	24.3	35.4
1958	3.5	34.0	30.5	39.1
1959	3.4	40.18	36.8	43.2
1960	4.0	42.80	38.8	43.4
1961	5.3	41.74	36.4	32.8
1962	5.9	44.92	39.0	35.9
1963	6.6	53.63	47.0	39.9
1964	8.7	49.38	40.7	30.0
1965	9.9	55.77	45.9	30.4
1966	10.4	67.3	56.9	38.0

Source: See Balance of Payments data, Chapter VI, p. 272.

* including re-exports (f.o.b.). ‡ c.i.f.

These figures reveal a substantial excess of goods imports over goods exports, an excess which is in value about one third of GDP throughout 1954-1966. Let us now examine in detail the possible effects that such an import surplus can have on the structure of the economy.

The Import Surplus and Economic Structure. - The import surplus enjoyed by the Jordan economy during our period has been financed through various forms of external transfers. While these foreign

transfers are analysed elsewhere in our study we here examine them in relation to GDP. Table XXI shows that over the years 1954-1966 these foreign resources put at the disposal of the economy have been of the order of about one third of GDP.

TABLE XXI: Total Foreign Transfers and their Ratio to GDP 1954-1966

Year	Total External Transfers *	GDP	Transfers as Percentage of GDP
	JDm.	JDm.	
1954	18.10	52.44	34.5
1955	22.00	47.89	45.9
1956	21.60	66.64	32.4
1957	24.10	68.57	35.2
1958	30.70	77.99	39.4
1959	29.06	85.17	34.1
1960	33.98	89.44	38.0
1961	31.31	110.87	28.2
1962	36.58	108.62	33.7
1963	30.85	117.67	26.2
1964	42.99	135.52	31.7
1965	40.80	150.95	27.0
1966	48.82	149.74	32.6
Total	410.89	1261.51	32.6

* includes: total factor income; current transfers to households and to government; capital transfers to government; and loans to private and public sectors.

Source: Balance of Payments data in Chapter VI, Tables XVI and XIX.

In the first instance these foreign transfers result in an increase in the level of real income of the country. We have earlier

on seen that a positive association exists between the level of per capita income and the share of the S sector in employment and, to a lesser extent, in product. Thus foreign transfers can be considered as making for an expansion of the S sector share in as much as such transfers add to the level of income. In the case of Jordan, such an effect would be especially significant when we keep in mind that such foreign transfers have averaged about one third of GDP over the twelve-year period between 1954 and 1966.

However, in practice such an effect of foreign transfers would be greatly enhanced through the responsiveness of the domestic economy from the production side to the increased level of income and the resultant increase in aggregate demand. Evidently there would be a tendency for whatever excess demand materialized to spill over, so to speak, into the foreign trade sector in the form of an increased demand for imports. This substitution of imported supplies for the inadequate domestic supply in practice occurs much more readily in the case of goods rather than services. The latter enter international trade to a much more limited extent than the former as services are either unable to enter the channels of foreign trade or can do so only at considerable costs. Our data for the Jordan balance of trade (Tables XIX and XX) in fact reveal that services have a much more limited weight in the import bill of the country during our period. While the imports of goods expand from JD18.6 million in 1954 to JD67.3 million in 1966, services imports grow from JD1.2 million to JD9.3 million during that same period. Accordingly this large and

goods-intensive foreign trade basket would induce an expansion of tertiary activities to "accommodate" or "absorb" this relatively large inflow of goods. Thus such domestic sectors as trade, banking, transport (and a host of other services) have to expand in the process and as part and parcel of the expansion of goods imports. Otherwise (i.e. if such S sectors cannot expand their output) then the increased inflow of imported goods cannot logically take place. Thus while price rises resulting from the initial inability of the domestic sectors that are engaged in the production of goods (the A and M sectors) to expand their output to meet the increased level of demand for their products results in a shift to imports, the inflow of such imported goods stimulates the expansion of the S sector. Hence in addition to the initial income effect of foreign transfers which tends to increase the share of the S sector in employment and product, a substitution effect materializes whereby imported goods are substituted for domestically produced goods, this inducing in its turn a further expansion of tertiary activities to balance or accommodate such a goods-intensive basket of total resources.[1]

In addition to the foregoing effects that an import surplus can

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1. These terms, "income effect" and "substitution effect", are used by G. Ofer, The Services Industries in a Developing Economy: Israel as a Case Study (New York 1967). See especially Chapter 3, "Causes of Israel's Excess of Services," where the import surplus through what is termed its income and substitution effects is identified as the main cause behind the "gap between the volume of services in Israel and in countries of a similar level of development or per capita income" (pp. 39 ff.).

have on the structure of an economy, mention ought to be made of the initial distribution of the foreign transfers themselves that make possible such an import surplus. As we shall see later on in the relevant part of our study dealing with public finance, foreign transfers to the government have played an instrumental rôle in expanding the activity of the government. As we can see from Table XXII, nearly two thirds of the total foreign transfers during our period went to the government in the first place. The public activities which such transfers helped to finance evidently resulted in an expansion of the S sector (within which public administration is included) beyond the level that would have prevailed in the absence of such foreign aid or if such foreign transfers went instead to the private sector. In fact, as we shall see in the part dealing with Public Finance, the government in Jordan has been participating in economic activity to a much larger extent than one normally expects to find in countries at a comparable stage of development.

The first effect of such an inflow of foreign resources was to cause an expansion in those activities that fall under the S sector (Public Administration and Defence) as the larger part of these foreign transfers to the government went to finance its recurring expenditures. After this initial effect of expanding both employment and product in the S sector, such an expenditure of foreign transfers through the government budget went then to increase per capita income and further acted upon the share of the S sector in the manner just described (through its income and substitution effects). If such transfer of

TABLE XXII: Distribution of Total External Transfers between Private and Public Sectors, 1954-1966

Year	Transfers to Public Sector*		Transfers to Private Sector	
	JDm.	% of Total	JDm.	% of Total
1954	10.20	56.4	7.90	43.6
1955	13.90	63.2	8.10	36.8
1956	12.20	56.5	9.40	43.5
1957	14.50	60.2	9.60	39.8
1958	22.10	72.0	8.60	28.0
1959	19.31	66.4	9.75	33.6
1960	22.33	65.7	11.65	34.3
1961	20.53	65.6	10.78	34.4
1962	24.43	66.8	12.15	33.2
1963	18.43	59.7	12.42	40.3
1964	27.88	64.8	15.11	35.2
1965	24.54	60.1	16.26	39.9
1966	30.10	61.7	18.72	38.3
Total	410.89	63.4	150.44	36.6

* during 1954-1958 a minor element of "Interest and Dividends" which should go to the private sector is included in transfers to public sector for lack of details: see source.

Source: Balance of Payments data in Chapter VI, Tables XVI and XIX.

foreign resources by-passed the government's budget and went instead directly to the private sector, then the expansion of the S sector (specifically "Public Administration and Defence") would have been reduced to the extent that the government failed to raise additional revenue equal to its foregone income.

So far in our investigation of the structure of the Jordan economy

we have firstly discerned an excess share of non-agricultural activities: this was especially pronounced in the share of the S sector in terms of both product and employment. The share of the M sector was found to be excessive only slightly in terms of employment with its product share being comparable to its own per capita income group (Tables XV-XVIII). In investigating the causes of the excess of tertiary activities in the economy a certain degree of foreign-trade specialization in services was found to exist (Table XIX). However, this explains only partially the large magnitude of the excess share of services. The import surplus and the foreign transfers that finance it have been pointed out as having a crucial role in causing this services-oriented skew in the structure of the economy through what can be termed the income effect, substitution effect and public finance effect of the import surplus. Thus while any foreign-trade specialization effect on the structure of the economy would come from a net exports of services which reaches a maximum of only 8 per cent of GDP in 1966 (see Table XIX), the impact of the import surplus stems from the much larger ratio of foreign transfers to GDP which has averaged about 33 per cent (see Table XXI).

In fact Jordan's experience in this respect is shared, to varying degrees, by a number of developing countries. It has been found in the previously cited study that countries with a relatively large and continuing deficit in their current balance of payments tend to have overconcentration of employment in their services sectors. In Israel, Puerto Rico, Venezuela, Ireland and Panama, all

of which had import surpluses that exceeded 5 per cent of their respective national products in the early 1950s, the employment share in their respective services sectors were in excess of their expected value by 5 to 8 per cent.[1] And another study has revealed that import surplus developing countries show a smaller share of agriculture (in both product and employment) and a larger share of services (also in both product and employment) than is found in balancing developing countries.[2] The share of agriculture in a group of fifteen import surplus developing countries was found to fall short of its share in another group of sixteen developing but balancing countries to the extent of 18 per cent in terms of product and 28 per cent in terms of employment.

At this point we are in a position to link our findings in respect of the structure of the economy to our previous discussion of sectoral growth. Here it becomes quite clear, as we have asserted earlier on (supra, p. 52), how certain exogenous factors permitted a large measure of sectoral imbalance which resulted in a seemingly reversed sequence of growth: the import surplus thus not only permitted the

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1. G. Ofer, op. cit., p. 53. The "excess of S sector employment share" is calculated from the difference between its actual share and its predicted share as given by regression lines based on Kuznets' data.

2. Fanny Ginor, "The Impact of Capital Imports on the Structure of Developing Countries," Kyklos, XXII(1), 1969, pp. 104-121. "Import-surplus" countries are defined as those whose import surplus was 5% or more of GNP for a period for not less than 8 years. Data utilized in this study were based on U.N. Yearbook of National Accounts Statistics 1965 and I.L.O., Yearbook of Labour Statistic 1965.

non-agricultural sectors to expand unhindered by any inadequacies in the performance of the A sector, but, especially in the case of the S sector, it also had a positive rôle in inducing its growth to meet the large inflow of goods. And in the expansion of these tertiary activities, an adequate (even more than adequate) labour supply could be found amongst the refugees, instead of the necessity of relying solely on a shift of such resources from the A sector. In short, from this perspective, the previously examined sectoral trends become easily comprehensible. While trends in the A and M sectors will be surveyed (as already mentioned) in more detail separately, one ought to look into trends in the S sector which we had previously touched upon. In fact little was said about trends in this sector because only through viewing them from our present position can we place them in proper perspective as we said in this connection previously (supra, p. 66).

(6) Trends in the Growth of Tertiary Activities

We present our detailed data on the S sector in a form that is comparable to the cross-section data found in our previous source: Transport (T), Wholesale and Retail Trade and Banking (C), and the remaining Other Services (OS). In terms of product we find that all these sectors have shares far in excess of the average shares found in countries with a comparable level of income. In terms of employment share, however, only the C sector shows any appreciable excess with its share being nearer the average of groups III and IV combined.

Even if we adjust our employment data for Jordan by calculating percentage shares that exclude the large portion of not adequately classified labour force (as described above on pages 70-71), the T and OS sectors still fail to show the same degree of excess found in the C sector.

TABLE XXIII: Percentage Shares* of Transport, Commerce, and Other Services in National‡ Product and Labour Force,ϕ Countries Grouped by Per-capita Product,§ Recent Years,** and Jordan, 1954-1966

Groups of Countries by Per Capita Product	T		C		OS	
	Product	Labour	Product	Labour	Product	Labour
	%		%		%	
I and II	9.7	7.7	13.3	13.1	22.0	20.9
III and IV	7.4	4.5	15.7	8.2	25.6	19.1
V	8.2	3.2	13.5	7.4	20.4	13.7
VI	4.4	2.5	12.1	5.2	23.4	12.5
VIII	3.3	2.3	14.4	4.6	15.7	6.5
Jordan 1954-1960	12.0	3.1‡‡	21.1	8.0‡‡	32.2	13.7‡‡
" 1961-1966	10.1	(3.7)§§	22.4	(9.9)§§	31.0	(16.8)§§
" 1954-1966	11.1		21.7		31.6	

* unweighted arithmetic means of product and employment shares of individual countries in each group.

‡ see note (*) of Table XVI, p. 68 supra.

ϕ including unpaid family labour.

§ see note (ϕ) of Table XVI, p. 68 supra.

** circa 1950.

‡‡ figures are for 1961. See Table XVII, p. 70 supra.

§§ figures are adjusted as described in connection with Table XVII.

Source: S. Kuznets, op. cit., pp. 13 and 27; figures for Jordan are all from data given in thesis (Jordan is not included in Kuznets' data).

The association between per capita income and product shares in the S sector, as previously indicated, is not as clear as the association between per capita income and employment. Nevertheless the product figures in Table XXIII are quite useful in indicating that product shares in all the tertiary sectors exceed by far the averages found in the highest per capita product group. Now when we turn to employment the figures for Jordan are for the year 1961 when it had reached group V in terms of per capita income. It is quite significant that employment shares of the T and OS sectors come quite near the averages for group V. However the C sector share still reveals a high degree of concentration that puts it close to groups III and IV.[1] Even when we adjust our employment data as described the same results obtain in this respect.

What is of further interest is the trends of growth in these various sectors as revealed by their product shares for the two periods 1954-1960 and 1961-1966. Whereas there is a general tendency for the T sector share in product to increase with the increase in per capita income, in the case of Jordan, while during 1961-1966 per capita

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1. The commercial sector in Jordan has been a traditionally large sector ever since World War II. Cf. R.S. Porter, Economic Survey of Jordan, pp. 9-11: a less stringent application of import controls during the Second War coupled with smuggling resulted in the creation "of an important commercial sector in Amman which was largely based upon the re-export of imported goods to neighbouring countries, particularly to Palestine" (p. 9). After the war this sector continued to boom and the events of 1948 and the consequent rapid growth of imports that emerged from the early fifties onwards ensured its further expansion.

income continues to rise, the T sector product share shows a decline as compared with 1954-1960. This is, as was mentioned previously, a reflection of the "over-expansion" that occurred in the transport sector in the late fifties whereby the overall growth of the economy that came in the sixties resulted in a fuller utilization of the previously under-employed resources in this sector rather than in an expansion of its capacity. As a result of the method followed in estimating value added in the transport sector, this ensued in the decline of its product share.

Similarly we find that a decline occurs in the product share of the OS sector during 1961-1966 as compared with 1954-1960. This decline is in fact the result of trends in the Public Administration and Defence sector which makes up the largest part of this sector. An "over-expansion" of this Public Administration and Defence sector can be discerned from the outset of this period as a result of the finance of government expenditure through foreign transfers. The rapid expansion of activities in the other sectors of the economy was not associated, as probably would have been the case in the absence of these special circumstances, with an equivalent expansion in this sector. In fact the participation of the government in the economic life of the country was to start with at a high level and the increased share of the government in terms of product that one might expect to occur in the process of economic development had already in a sense occurred.

B. Expenditure

So far we have been looking at the growth of income from the product side. We now turn to examining income from the expenditure side.

TABLE XXIV: Expenditure on Gross National Product at Current Market Prices, 1959-1966 (JD million)

	1959	1960	1961	1962	1963	1964	1965	1966
1. Private consumption expenditure	87.09	88.45	102.76	102.36	116.82	123.47	138.04	149.61
2. General government consumption expenditure	25.45	27.02	28.12	29.04	33.04	32.27	36.79	37.47
3. Gross private fixed capital formation.	13.02	13.05	11.48	13.95	12.86	12.80	13.55	15.20
4. Gross fixed capital formation of general government	5.04	4.46	5.47	8.06	7.16	5.97	10.35	12.45
5. Change in stocks	-5.49	-0.42	1.97	-1.79	-0.02	6.52	3.89	0.44
6. Expenditure on consumption and gross capital formation	125.11	132.56	149.80	151.62	169.86	181.03	202.62	215.17
7. Exports of goods & services	11.79	12.79	16.95	19.08	20.26	24.57	28.54	32.06
8. Expenditure on gross domestic product & imports	136.90	145.35	166.75	170.70	190.12	205.60	231.16	247.23
9. Less imports of goods & services	43.37	47.05	46.61	51.80	61.06	56.65	63.55	76.60
10. Expenditure on gross domestic product	94.53	98.30	120.14	118.90	129.06	148.95	167.61	170.63

11./...

(Table XXIV, cont.)

	1959	1960	1961	1962	1963	1964	1965	1966
11. Net factor income from abroad	5.60	7.39	7.00	11.93	8.56	11.67	12.93	15.15
12. Expenditure on gross national product	99.13	105.69	127.14	130.83	137.62	160.62	180.54	185.78

Source: National Accounts, op. cit., p. 11.

Our data in Table XXIV give details of the expenditure on GNP at current market prices during 1959-1966. From these data one finds that private consumption expenditure comes during this period to 68.4 per cent of total expenditure on consumption and gross capital formation in the economy (item 6). Government consumption, on the other hand, comes to 18.8 per cent while expenditure on gross fixed capital formation comes to 8 per cent in the case of the private sector and 4.4 per cent in the case of the government, with 0.4 per cent going in the form of addition to stocks.

(1) Consumption

As far as private consumption expenditure is concerned, Table XXV gives us details of its composition during 1959-1966. By far the largest part of such private expenditure has been going, as would be expected, on food. But however, with the rapid growth of income during this period, this proportion going on food shows a decline, while other items (health and services) show a gain.

TABLE XXV: Composition of Private Consumption Expenditure, 1959-1966
(percentages)

	1959	1960	1961	1962	1963	1964	1965	1966
Food	54.3	52.3	55.5	52.4	49.4	48.0	48.2	44.5
Beverages	0.6	0.6	0.7	0.7	0.8	0.7	0.7	0.9
Tobacco	2.4	2.9	2.6	2.7	2.5	2.8	2.5	3.6
Clothing, textiles and footwear	9.8	9.3	9.1	8.9	9.4	9.9	10.0	9.7
Furniture and household equipment	4.2	3.9	3.4	4.0	4.9	4.5	4.7	5.1
Housing	7.3	8.1	7.8	8.4	8.0	7.6	7.2	6.7
Domestic services	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.3
Personal care and health	2.3	2.3	2.2	3.7	4.0	3.9	3.8	4.4
Transport	9.8	10.1	9.1	10.0	9.8	11.4	8.4	8.2
Education	1.2	1.2	1.1	1.3	1.2	1.3	1.4	1.3
Recreation and amusement	2.8	2.8	2.4	2.6	2.4	2.8	2.8	3.4
All other goods and services	4.8	6.0	5.6	4.8	7.2	7.7	9.8	11.9
Total Current Expenditure in Jordan	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: National Accounts, op. cit., p. 17.

While food absorbs a relatively high percentage of total consumption expenditure throughout this period, its share declines from 54 per cent during 1959-1961 to 47 per cent during 1964-1966, thus indicating, as would be expected, a relatively low income elasticity of demand for food. Items such as health and education on the other hand show a rising share, thus illustrating the normally assumed or

expected differences in the income elasticities of demand for various commodities in a developing economy whereby as income rises relative luxuries or semi-luxuries show an increasing importance in the budgets of consumers.[1]

(2) Capital Formation

General government consumption expenditure is analysed elsewhere in the thesis and we turn our attention now to capital expenditure. We have already noted that during 1959-1966 private expenditure on gross fixed capital formation comes to 8 per cent of total expenditure (i.e. of item 6 in Table XXIV) and that government expenditure on gross fixed capital formation comes to 4.4 per cent. Great importance is normally attached to the relationship between such expenditures on capital formation and the growth of production and Table XXVI gives us the magnitudes of private and government capital expenditures and relates the level of gross domestic capital formation to GDP.

Both government and private expenditure on fixed capital formation show substantial increases during the period 1954-1966, and throughout these years the outlay of the private sector on fixed capital formation exceeds that of the government. If account is taken of changes in stocks then the figure for gross domestic capital formation at which we arrive also shows a rapid increase over our period, with its ratio to GDP rising from 11 per cent during 1954-1955 to over 18 per cent at the close of our period (over the whole of 1954-1966 its ratio to GDP comes to 16.8 per cent). However, before

1. Cf. Simon Kuznets, "Quantitative Aspects of the Economic Growth of Nations: VII. The Share and Structure of Consumption," Economic Development and Cultural Change, X, No. 2, Part II (January 1962). The percentage of private consumption expenditure going on food declines successively from 48.4% in the lowest per capita income group of countries (group VI and VII) to 40.2% in group IV and V, to 35.6% in group II and III and finally to 27.2% in group I.

TABLE XXVI: Gross Domestic Capital Formation, 1954-1966

Year	Gross Fixed Capital Formation		Change in Stocks	Gross Domestic Capital Formation	
	Private JDm.	Government JDm.	JDm.	JDm.	Percentage of GDP
1954	2.30	2.50	1.10	5.90	11.3
1955	5.30	2.70	-2.90	5.10	10.7
1956	5.30	2.70	5.70	13.70	20.6
1957	5.20	3.10	1.00	9.30	13.6
1958	6.90	4.00	-1.70	9.20	11.8
1959	13.02	5.04	-5.49	12.57	14.8
1960	13.05	4.46	-0.42	17.09	19.1
1961	11.48	5.47	1.97	18.92	17.1
1962	13.95	8.06	-1.79	20.22	18.6
1963	12.86	7.16	-0.02	20.00	17.0
1964	12.80	5.97	6.52	25.29	18.7
1965	13.55	10.35	3.89	27.79	18.4
1966	15.20	12.45	0.44	28.09	18.8
			Total 1954-66:	213.17	16.8*

Source: R.S. Porter, op. cit., p. 6; National Accounts, op. cit., p. 11.

* calculated by dividing total GDCF over total GDP for the whole of the period 1954-1966.

we look further into this increase in capital formation vis-à-vis the growth of GDP let us examine details of the investment that occurred during these years. Table XXVII gives details of total fixed capital formation during 1954-1966 by type of capital good.

TABLE XXVII: Total Fixed Capital Formation by Type of Capital Good, (1954-1966)

Year	Construction and Works		Transport Equipment		Machinery and Equipment		Total
	JDm.	% of Total	JDm.	% of Total	JDm.	% of Total	JDm.
1954	3.20	66.6	0.90	18.8	0.70	14.6	4.80
1955	4.90	61.2	1.90	23.8	1.20	15.0	8.00
1956	5.30	66.2	1.60	20.0	1.10	13.8	8.00
1957	5.60	67.4	1.40	16.9	1.30	15.7	8.30
1958	7.10	65.2	1.90	17.4	1.90	17.4	10.90
1959	11.78	65.2	2.40	13.3	3.88	21.5	18.06
1960	11.53	65.8	1.41	8.1	4.57	26.1	17.51
1961	11.42	67.5	1.59	9.4	3.94	23.2	16.95
1962	14.88	67.5	2.30	10.4	4.83	21.9	22.01
1963	15.91	79.5	1.34	6.7	2.77	13.8	20.02
1964	14.30	76.1	1.49	7.9	2.98	15.9	18.77
1965	18.80	78.7	1.60	6.7	3.50	14.6	23.90
1966	20.09	72.7	3.63	13.1	3.93	14.2	27.65
Total:	144.81	70.6	23.46	11.5	36.60	17.9	207.87

Source: R.S. Porter, Op. cit., p. 11; The National Accounts, p. 15.

These figures show that by far the largest share of total fixed capital formation went to construction and works. This reflects factors already mentioned in our analysis of the growth of the economy during this period, viz., the shortage (or even in certain instances complete absence) of infra-structure with which the economy had to cope in consequence of the political changes that followed the war of 1948. Dwellings initially absorbed the largest part of such investments in construction and works, but more recently expenditures by the government

on public construction and works have expanded very rapidly to become by far the largest single item within this category (Table XXVIII).

TABLE XXVIII: Composition of Fixed Capital Formation in Construction and Works, 1959-1966 (JD million)

Year	Dwellings	Non-Residential	Farm Construction	Public Construction and Works	UNWRA Construction
1959	5.75	1.12	0.16	4.39	0.36
1960	6.25	1.10	0.13	3.91	0.14
1961	5.15	1.06	0.25	4.76	0.20
1962	6.48	0.93	0.22	6.98	0.27
1963	7.60	1.45	0.44	6.32	0.10
1964	7.69	1.34	0.25	4.94	0.08
1965	7.42	1.98	0.35	9.00	0.05
1966	6.04	1.49	0.86	11.60	0.10

Source: The National Accounts, op. cit., p. 15.

Thus fixed capital formation in the public construction and works sector more than doubled from JD4.39 million in 1959 to JD11.60 in 1966. Irrigation projects in the Jordan Valley, highway construction, the development of the port of Aqaba were some of the main development projects in this sector the implementation of which resulted in this rapid growth in the government's outlays on fixed capital formation. And although the private sector (Table XXVI) surpassed by far the government in its contribution to capital formation between 1954 and 1961, in the latter part of our period and from 1962 onwards the rapid growth in the development expenditure of the government increases its

contribution to capital formation to a level which is much closer to that of the private sector.

While government expenditure on capital formation went to finance the development of infra-structure, the capital expenditure of the private sector went, other than on dwellings, to finance investments in transport equipment and producers goods of machinery and other equipment. Investments in transport equipment and in machinery and equipment reflect the various phases of growth of the relevant sectors during our period. Thus, with the shortage of transport equipment that faced the economy after 1948 (the sudden growth of population and imports and the more distant seaports that replaced the nearby Palestinian ports) the level of investments in transport equipment (mostly road vehicles) increased from less than JD 1 million in 1954 to JD 2.40 million in 1959. It thereafter levelled off and not until 1966 did such investment reach a level that surpassed that of 1959. In fact in the earlier part of the sixties excess capacity developed within the road haulage sector, thus necessitating the rationing of haulage between vehicles which remained under-employed. The increase in the level of investment in transport equipment that occurred in 1966 resulted from investments in passenger transport vehicles, the demand for which expanded very rapidly with the growth of economic activity and mobility and with the absence of other forms of passenger transport such as railways.

Similarly investments in machinery and equipment reflect the phases of growth in the manufacturing sector which absorbed most of

these capital goods. As we shall see in the relevant part of the thesis dealing with manufacturing, activity within this sector expanded from very low levels after 1948, and in the late fifties and early sixties a great deal of development occurred with the setting up of the major manufacturing industries that exist at present in Jordan, such as petroleum refining, cement, phosphates, and so on. Thus investments in machinery and equipment increased from a low level of JD 0.7 million in 1954 to a peak of about JD 4.5 million annually during 1960-1962, the time during which the capital equipment for such industries was imported. After 1962, and with the completion of these major projects in this sector, investments in machinery and equipment levelled off, to about JD 3 million annually. The expansion of capacity in existing industries plus the establishment of the odd new industry does not require as much investment as occurred in the period of main expansion during 1959-1962. In addition, the import of contractors' equipment must be borne in mind as rapid expansion also occurred in that sector, as we have seen in examining the growth of GDP during our period.

To put our preceding comments in proper perspective we can compare the relative weights of various types of investments that occurred in Jordan during our period with the situation in other countries. Here we can utilize data from Professor Kuznets' study which will help illustrate and compare some of the points raised so far. As can be seen from Table XXIX, which shows the percentage distribution of gross domestic capital formation by type of capital

good in a cross-section of countries in the post-World War II years, construction and especially dwellings have absorbed a relatively larger share of total gross domestic capital formation in Jordan than in countries at widely differing levels of development.

TABLE XXIX: Percentage Distribution of Gross Domestic Capital Formation by Type of Capital Good, Countries Grouped by per capita Product 1951-1957 and Jordan, 1954-1966

Type of Capital Good	Groups of Countries by Per Capita Product				
	I	II & III	IV & V	VI & VII	Jordan
	(Percentage of Gross Domestic Capital Formation)*				
Dwellings	21.9	22.2	19.1	17.2	30.8 ‡
Other Construction	33.6	30.7	36.2	39.6	39.2 ‡
All Construction	55.6	52.2	50.7	54.6	67.9 ø
Producers' Equipment	38.7	43.6	38.7	34.4	28.2 ø
Increase in Stock	7.1	4.3	9.4	9.8	3.9 ø

Source: Simon Kuznets, "Quantitative Aspects of the Economic Growth of Nations: V. Capital Formation Proportions: International Comparisons for Recent Years," Economic Development and Cultural Change VIII, No. 4, Part II (July 1960), p. 33. Data for Jordan (which are not included in Professor Kuznets' study) previously presented in thesis.

* percentages are unweighted arithmetic means of percentages for individual countries in each group.

‡ 1959-1966.

ø 1954-1966.

The share of dwellings in gross domestic capital formation in Jordan comes to 30.8 per cent which compares with 19.1 per cent in

groups IV and V with which Jordan can be compared in terms of per capita income. In fact the share of dwellings in capital formation in Jordan exceeds that found in groups of countries with the highest per capita income thus reflecting the special circumstances in Jordan during our period which opens up with a sudden influx of a homeless refugee population which amounted to more than one third of the indigenous population. The share of "other construction" is comparable to that found in groups VI and VII, and it is the large share of dwellings that is behind the high share of "all construction" in Jordan, 67.9 per cent, as compared with other countries and even with countries in group I with the highest share of "all construction" (55.6 percent). The expanded share of construction in capital formation has, as a corollary, resulted in a reduced share of producers' equipment which comes to only 28.2 per cent as compared with 34.3 per cent in the combined groups VI and VII which together have the lowest producers' equipment share.

Having examined the details of the capital formation that occurred during our period we next turn to examine this capital formation in relation to the growth of product. In Table XXVI we saw that gross domestic capital formation increased from a level of about 11 per cent of GDP in 1954-1955 to over 18 per cent in 1964-1966. We had seen earlier on in this part of our study that GDP increased by about 10 per cent in current terms and 8 per cent in real terms, and the striking feature of this rapid growth is the relatively low rate of capital formation that accompanied it. If we

relate the rate of growth of GDP in real terms to the level of gross domestic capital formation as a percentage of GDP (which is in current terms) during our period then we obtain an incremental capital output ratio (ICOR) of only 2.1 for Jordan over the period 1954-1966. The method which we have adopted here for calculating ICOR is the same as that adopted by Professor Kuznets in his study of capital formation proportions just cited where, after investigating various possible methods of measuring this ratio, he utilized this method. And when we compare the ICOR for Jordan with those which he obtains for the countries he investigates we find that Jordan has had a remarkably low ICOR.[1] This aspect of the economic development of Jordan is further investigated in that part of our thesis dealing with the Finance of Development where we investigate our data in the light of Professor Kuznets' and other findings.

Before leaving this part of our study we ought to mention that our capital formation data have been presented in gross terms, i.e. without making allowances for depreciation. Previous to 1965 no estimates of depreciation allowances were made in Jordan, but in that year and also in 1966 the following data were made available by the National Accounts. These date (Table XXX) indicate that depreciation amounted to 4.42 per cent of GDP in 1965 and 4.82 per cent in 1966. Thus to arrive at capital formation in net terms a ratio of about 5 per cent of GDP would have to be deducted from gross values to account for

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1. See below, Chapter on The Finance of Development.

depreciation. These estimates will be utilized in the relevant part of our study where the question of capital formation is further examined.

TABLE XXX: Depreciation Allowances, 1965 and 1966 (JD million)

Sector	1965	1966
Agriculture	0.20	0.21
Manufacturing*	2.67	2.72
Construction	0.11	0.17
Transport	1.15	1.41
Trade ♯	0.25	0.29
Dwellings	1.42	1.50
Services	0.64	0.70
Public Administration	0.23	0.23
TOTAL	6.67	7.21

Source: The National Accounts, op. cit., p. 50.

* including mining, electricity and water supply.

♯ including banking and finance.

Note on the data given in Table I of Chapter III (Pt. One)

The first official income estimates in Jordan were undertaken by the Department of Statistics in 1959. Mr. R.S. Porter of the British Middle East Office, who acted as an adviser to the Department of Statistics in this project, assembled National Accounts tables for the period 1954-1958 basing his estimates on the outcome of the 1959 study. However, in the course of income estimates in the years following 1959, successive adjustments were carried out on the original estimates as, in the words of the Director of the Department of Statistics, "estimates [were] being continually improved and margins of error inevitable in National Income calculations [were] being reduced."[1] As a result, a discrepancy developed between Mr. R.S. Porter's series (which were based on the original 1959 estimates) and the subsequent series given in the National Accounts.

In our analysis of the industrial origin of the Gross Domestic Product, we therefore reconciled the 1954-1958 series to the subsequent series by taking 1959 as a common year and adjusting the value added within each sector during 1954-1958 by the same ratio by which the original 1959 estimates differed from the final adjusted estimates. In the case of the agricultural sector, we compared various sub-sectors and found discrepancy only in the case of the "sales of animals" and "costs of production", and we adjusted only these two sub-sectors.

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1. The National Accounts, op. cit., p. 1 (Introduction).

This adjustment has the advantage of rendering the estimates for the initial five years more readily comparable with those for later years and in fact does not affect seriously either the rates of growth of the various sectors nor their percentage contribution to total GDP as we can see from the following indices and percentages:-

		1954	1955	1956	1957	1958
Indices of Growth of A, M and S Sectors	A	100 (100)	50 (44)	131 (134)	97 (90)	109 (91)
	M	100 (100)	124 (124)	148 (148)	161 (161)	187 (185)
	S	100 (100)	107 (107)	122 (123)	143 (144)	163 (164)
Percentage Contribution to Total GDP	A	30.2 (29.8)	16.5 (14.4)	31.2 (30.9)	22.4 (20.7)	22.1 (18.7)
	M	9.9 (11.3)	13.4 (15.6)	11.4 (13.0)	12.1 (14.1)	12.4 (14.5)
	S	59.9 (58.9)	70.1 (70.0)	57.4 (56.1)	65.5 (65.2)	65.5 (66.8)

Note: Figures in brackets refer to the original unadjusted estimates in R.S. Porter, Economic Trends in Jordan 1954-1959, p. 1. Other figures are those used in thesis.

As far as the indices of growth are concerned, minor differences arise only in the case of agriculture which however do not greatly affect the extent of agricultural fluctuations. As far as the structure of the economy is concerned the only significant difference

that arises as a result of our adjustment of the data concerns the M sector. It seems that the original estimates put the share of the M sector two percentage points higher than the adjusted share. In fact the original 1959 estimate for value added in "manufacturing, mining and public utilities" was found by the Department of Statistics to be slightly excessive and its subsequent reduction resulted in the reduction of the value added in the M sector by about two percentage points of total GDP. And our adjustment of the 1954-1958 data brings in line the percentage contribution of the M sector during 1954-1958 to that of the 1959-1966 estimates given in the National Accounts.

CHAPTER III (continued):

PART TWO : MONETARY TRENDS, 1950-1966

So far in this part of our study we have been analysing developments in the economy from the "real" side: i.e. from the product and expenditure side. An examination of developments in the monetary side can help not only complement but also scrutinize our findings so far. Moreover, such an examination will provide a useful framework for analysing the overall rôle of foreign aid in the development of the Jordan economy during our period. Our task, as we shall see, will be greatly facilitated by the direct and simple manner in which the monetary and real sectors of the economy were linked. To be sure, the "veil" of money could hardly have been more transparent and less deceptive than it was in the case of Jordan during the period under review. We start our analysis by describing and outlining the monetary system of Jordan during our period.

(1) The Monetary System

The general characteristics of the monetary system in Jordan stemmed essentially from the particular currency system which was adopted. The currency system adopted in Jordan throughout our period falls within that category generally known as the sterling exchange standard which served the British Colonial territories.[1] Normally,

1. For an outline and analysis of this system see E. Nevin, Capital Funds in Underdeveloped Countries (London 1963), especially Chapter I, "The Currency System."

a Currency Board was entrusted with the management of the currency, issuing and redeeming local currency for sterling at a fixed rate. Thus with currency being issued only against a 100 per cent cover, the issue of a certain amount of currency meant the immobilization of an equivalent amount of sterling. Prior to 1950, the Palestine Currency Board served both Palestine and Jordan, with the Palestine pound being legal tender in both areas. After the termination of the Mandate and the creation of Israel, Palestine currency continued to be legal tender until 1950 when the Jordan Currency Board was established. It took over the functions of the former Palestine Currency Board as far as the territory of Jordan was concerned, exchanging Palestine pounds in the hands of the public for the new Jordan dinar at the rate of one to one, and redeeming the Palestine currency against sterling from the assets of the Palestine Currency Board.[1] Throughout our period the currency system remained essentially unchanged, although many changes in its detail were made (e.g. regarding the composition of its foreign assets holdings which initially had to be in sterling), until ultimately in 1964 the Central Bank of Jordan was established.

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1. As a result of the 1948 upheaval money supply (banknotes plus bank deposits) approximately doubled in Jordan. It is estimated that during 1947 and 1948 bank deposits totalling JD10 million were transferred to Jordan by the refugees in addition to the estimated JD10 million which they carried with them. However, a substantial part of this increased money supply "leaked out" in return for imports which doubled in value between 1947 and 1949. See U.N., Review of Economic Conditions in the Middle East 1951-52, Supplement to World Economic Report (New York 1953), p. 114.

Even when the Issue Department of the Central Bank replaced the Currency Board, the policy of a 100 per cent foreign assets cover to the currency issue was maintained, thus leaving the basic feature of the system unchanged.

As far as the banking system was concerned, it also conformed, especially at the outset, to the general pattern of colonial banking, with the absence of government control or supervision, and the near-complete confinement of banks' activities to the finance of commercial activities (based largely on imports).[1] Thus neither the supply of currency nor that of credit was within government control, and largely as a result of this there was a complete absence of public borrowing thus giving us the third main feature of the monetary system during our period, viz., the absence of "deficit finance". As Professor Prest put it in commenting about debt policy in underveloped countries, "In the traditional Currency Board set-up, Governments had no more facilities for borrowing from the local banking system than a reputable private firm [and] this inability to borrow from the banking system . . . has been paralleled by inability to borrow much from the general public."[2]

In such a monetary system as the one outlined, the balance of payments determined the currency supply: a surplus (on both current

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1. Cf. E. Nevin, op. cit., Chapter 3, "Commercial Banking."

2. A.R. Prest, Public Finance in Underdeveloped Countries (London 1968), p. 104. During our period no borrowing whatsoever was made by the government in Jordan from the general public.

and capital accounts) which was not held in foreign currency form (or in other foreign assets) automatically increased the currency supply, and a deficit subtracted from it an equal amount. The mechanical connection between the balance of payments and the money supply (i.e. currency plus other monetary assets which we shall presently define) could only be broken or modified through the commercial banks' credit creation. But, as will be presently seen, throughout our period the commercial banks' activities in Jordan conformed very closely and harmoniously with the currency system. As a result, the balance of payments (to emphasize again not only on current account but on both current and capital accounts)[1] primarily determined the currency (and as we shall see, the total money) supply: a surplus resulting in an excess demand for local currency resulted in an equivalent increase in currency supply (and in the foreign assets of the currency-issuing authority), and a deficit resulting in an excess demand for foreign currency resulted in an equivalent reduction in the currency supply (and, of course, in the foreign assets of the currency-issuing authority).

(2) The Monetary Mechanism

The fundamental aspect of monetary developments during our

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1. This point is emphasized by Professor Prest when he says, "Some writers have argued as if the supply of local currency was tied to the balance of payments on current account but this was clearly not necessarily so . . . the essential point was whether there was excess demand in any one year for sterling on current and capital account taken together; if there was, this automatically reduced the supply of local currency" (ibid., pp. 100-101).

period (an aspect which had far-reaching implications for the growth of the real sectors of the economy) was that our monetary system as outlined above was allowed, through the effects of exogenous factors, to function continuously within conditions of a "surplus". The mechanism of adjustment, as described above, is that of the classical 100 per cent gold standard type: a balance of payments surplus resulting in a monetary expansion and a deficit resulting in a monetary contraction until equilibrium was restored. What occurred in actual fact in the case of Jordan was that throughout our period, and through the effect of foreign aid, there were continuous and repeated surpluses in the balance of payments which resulted in a monetary expansion (except for a couple of years initially). To put it more precisely, the receipts of foreign exchange were continuously maintained at a high and increasing level through the key rôle of foreign assistance. The details of the balance of payments can be seen in the appropriate part of our study from which one can see that various types of "free" foreign transfers were injected into the economy repeatedly throughout our period.[1] The main part of such transfers went to the government which utilized them to finance its budget. Thus the expenditure by the government of such receipts increased, in the first place, the currency supply as the government exchanged its foreign receipts for local currency from the currency-issuing authority which accordingly held such foreign receipts as a cover for the equivalent amount of

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1. See Chapter VI, Tables XVI and XIX.

local currency it had to provide to the government. Now to comprehend fully the process of monetary developments during our period, let us just see what effects such a monetary expansion (or indeed any monetary expansion) can have.

Generally speaking, an increase in the money supply can be accommodated in an economy in a number of ways. It can be utilized (i) to purchase an increased domestic output of goods and services if such an increase is forthcoming, or (ii) to purchase additional imports. In addition to the above two possible uses, such an increase can either (iii) be invested in non-directly productive assets (e.g. securities and real estate), or (iv) simply go to increase the public's holdings of money. To the extent that the increased money supply is not accommodated, so to speak, by any or a combination of the above possible factors, it would (v) exert pressure on the price level in an upward direction and the quantity theory, or rather the "crude" quantity theory of money comes into its own. Now evidently the effect of an increase in the money supply on any of the above factors in a particular economy would depend upon the particular conditions prevalent in the economy in question.

Now to return to our discussion of the actual course of monetary events in Jordan during our period, we saw that through exogenous factors the supply of local currency was being repeatedly expanded. The injection of foreign aid into the economy through the government's budget (or through the other types of expenditure it generated in the private sector as far as foreign transfers to the private sector were

concerned) resulted in the first instance in an increase in the currency supply in Jordan. Now this increased money supply could in theory act along the various possible lines we have just outlined. However in the case of Jordan, item (ii) (i.e. imports) played a special rôle as the primary equilibrating factor. The monetary expansion that occurred in the first instance through the injection of external transfers resulted in an increase in the money income of the households which ultimately received it. Now such a monetary expansion was fully backed by foreign exchange, and throughout our period (except for a couple of years at the outset) imports were left by the authorities to vary freely in accordance with the demand for them. Thus the increased level of aggregate demand generated by this monetary expansion could be immediately matched by an increase in imports. And to the extent that this injection of foreign transfers "leaked out" in return for imports, foreign assets and thus the supply of money were reduced. Any net residue represented that part of the increase in money supply which was accommodated by the other factors of domestic output, financial investments, cash balances, or the price level. Now the latter, i.e. the price level, was largely precluded from being the major equilibrating factor through the special rôle of imports: if imports could be forthcoming (as they were) in sufficient quantities to meet the increased purchasing power generated by the increased money supply then there was no reason for prices to be bid up. Only in as far as imports were practically unable to act as substitutes for local production, as in the case of many services,

was the price level subjected to upward pressure. However, the Jordan economy was able to specialize in services the supply of which was substantially increased during our period as we saw previously in the first part of this chapter. To be sure, although data relating to the price level indicate an overall price stability, prices of services seem to have undergone larger increases than prices of goods. Thus the cost of living index for civil servants which we have already utilized indicates that while the overall cost of living index (for all income groups of civil servants) increased from a level of 100 in 1958 to 117.7 in 1968, "foodstuffs" show an increase to a level of only 114.7 while "rent" increased to 121.3 and "other services" to 153.1.[1] This confirms what we would *a priori* expect from the particular manner in which the growth of the economy was stimulated, *viz.*, a monetary expansion of a "special" type fully backed by real resources. The resultant increase in aggregate demand could be (and indeed was) readily met by increased imports as far as "importables" were concerned, and this subtracted from the money supply and aggregate demand an equal amount.

Therefore, whatever amount of the increase in money did not leak out in return for imports was a reflection of either an increased domestic output ((i) above), or an increased demand for securities and real estate ((iii) above), or an increased demand for money to hold ((iv) above), that is not forgetting the possible increases in the prices

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1. Family Expenditures and Cost of Living Index for Civil Servants, p. 33.

of non-importables. But, as we shall presently see, during our period a very substantial monetary expansion occurred which could have been only partly met or absorbed by the increases in the prices of services. In fact, whatever monetary expansion was not offset by an increase in imports was primarily accommodated, as we shall see, by items (i) and (iv) above, and to a lesser extent by item (iii).

Before we turn to a detailed examination of monetary trends against the background of our foregoing comments, mention ought to be made of an interesting aspect of this part of our analysis which will help put in proper perspective the rôle of foreign aid in the overall development of the economy. One can view the developments which occurred in the Jordan economy during our period as being to a significant extent a response to a monetary expansion of a special type: a monetary expansion largely or even fully backed by real resources in the form of foreign exchange. And furthermore, the response to this unusual form of monetary expansion was greatly enhanced by the special conditions surrounding the emergence of Jordan in its post-1948 form. Generally speaking, the effectiveness of monetary expansion in a less developed country as a method of achieving economic development is bogged down perhaps by two main factors: the inelasticity of domestic supply in the short run, and secondly the inadequacy of foreign exchange earnings to finance the additional imports generated by the difficulty of adjusting domestic output in the short run. Consequently corrective measures are swiftly undertaken which normally remove the original stimulus for domestic output expansion. Undoubtedly the ability to maintain the stimulus generated by monetary expansion for prolonged periods would enhance the ability of the domestic economy to respond.

In fact one can view the domestic sectors of the Jordan economy as being continuously "exposed" to a high level of aggregate demand which was repeatedly fed through the injection of foreign transfers into the economy. Any inability to meet this high level of demand through domestic production was however readily compensated for by the inflow of imports rather than by price rises. The Jordan economy can be viewed as being subjected to conditions which provided the benefits, and left out the adverse effects of monetary expansion as a stimulus to growth. However as we saw earlier in this part of our study, the economy responds in a fashion that renders it dependent upon the continuation of this injection of external resources: imports of goods flow in, being paid for by the receipts of "free" foreign transfers, while the economy concentrates on the production of non-importables, i.e. services. We also saw that such a tendency has been discerned in the structures of other economies that have experienced similar conditions in their balance of payments.

(3) Monetary Trends

(a) The Supply of Money. - Let us now proceed against the background of the foregoing description and theoretical outline of the monetary system to examine the actual monetary trends during our period. Table XXXI contains details of the Money Supply during the years 1950-1966.

The first step in our analysis is to specify what we mean by "money". To use Friedman's words, "there is no hard-and-fast line

TABLE XXXI: Money Supply, 1950-1966 (JD millions)

End of Year	Currency Outside Banks	Private Demand Deposits	Private Time/Saving Deposits	Government Deposits	Total
1950	8.6	5.8	0.8	2.3	17.5
1951	8.4	5.9	0.7	1.2	16.2
1952	7.7	4.9	0.8	2.5	15.9
1953	8.6	5.1	1.1	3.4	18.2
1954	10.6	6.1	1.5	3.5	21.7
1955	11.1	6.4	3.1	5.1	25.7
1956	14.6	5.7	2.7	8.0	31.0
1957	14.7	7.5	3.5	8.5	34.2
1958	15.2	9.2	3.6	9.7	37.7
1959	15.3	9.0	4.7	10.4	39.4
1960	15.6	10.5	4.9	12.3	43.3
1961	17.0	12.0	6.7	12.3	48.0
1962	19.0	14.4	9.6	15.1	58.1
1963	20.4	16.5	11.2	6.6	54.7
1964	23.0	19.1	14.2	14.7	71.0
1965	26.4	22.5	18.3	12.8	80.0
1966	30.3	27.3	20.6	13.9	92.1

Source: International Monetary Fund, International Financial Statistics (Washington), Vol. XIII, No. 12; Vol. XVII, No. 12; Vol. XXI, No. 6. Note: Column 5, as explained below, is adapted from IFS data.

between "money" and other assets." [1] In fact the guiding line in this respect can be obtained from the particular problem under examination. In our case what is of interest to us is the holding of monetary assets

1. M. Friedman (ed.), Studies in the Quantity Theory of Money (Chicago 1963): "The Quantity Theory of Money - A Restatement," p. 19.

in their various forms rather than the holding money in its strictest highly liquid form. We saw that during our period the receipts of foreign transfers served to increase the supply of local currency and the inflow of imports that was generated by this monetary expansion served to subtract from it. Throughout our period (except as already mentioned during the first couple of years) imports were flowing in "freely" to meet whatever excess demand developed in the economy. Thus what becomes of interest to us is the holding of monetary assets instead of "going out" of money and into imports. If the monetary expansion that occurred was not "cancelled" (as it could have been) by an equivalent increase in imports, then other developments in the domestic sectors of the economy must have accommodated this monetary expansion. Our economy starts initially with a low level of monetary assets, the injection of foreign transfers results in a sustained upward trend in the volume of such domestic monetary assets: this increase in the monetary assets in their various forms represents in effect a residual which did not "leak out" in return for imports but was instead absorbed through various developments in the domestic sectors. It is in this respect that the variable representing monetary assets (of varying degrees of liquidity) becomes highly significant. To put it in short, the most useful question that one can ask is:- If such a rapid and large monetary expansion occurred, why did that particular residual of monetary assets remain within the economy, rather than leaking out in return for imports as it could have done? In identifying the forces at work behind the ability of the economy to

"hold" or "keep" that residual one would in effect be identifying the major overall trends in the economy during this period. This is especially so when we hear in mind the proportions of the various factors at work here: as we shall see in the relevant part of our study, the foreign transfers that were injected into the economy (and that resulted in the monetary expansion) have averaged about one ~~third~~ fifth of GDP throughout our period.[1]

Thus at this point our definition of "money" during our period in Jordan should be evident. In Table XXXI we have defined total money supply not only to include currency outside banks and private demand deposits (the sum of both of which the IMF defines as "money" in its IFS), but also to include private time and saving deposits (or what the IFS defines as "quasi-money") and, finally, government deposit The inclusion of private time and saving deposits is determined by our choice of the dividing line between "money" and other assets: what is of interest for us is not only money in its strictest highly liquid form, but also other less liquid forms which still could have leaked out in return for imports but, for reasons which we will try to identify, did not do so.

If the reasons behind our decision to include private time and saving deposits are thus explained, the reasons behind the inclusion

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1. See Chapter VIII, Table XV , where in addition it can be seen that Jordan has had one of the highest ratios of foreign transfers to GDP amongst the developing countries.

of government deposits are not so readily apparent. Government bank deposits in Jordan throughout our period are of a different nature from their counterpart in an advanced country where government bank deposits are often a reflection of a policy decision to influence the course of monetary developments and are varied in accordance with the government's monetary policy. Instead, in Jordan, government bank deposits come very close (or rather are identical) in their economic function to private bank deposits, for they represent an excess of funds at the government's disposal held in reserve for any needs that may result from a future inability to finance expenditures. In fact, as we have already noted, the government has had no facilities whatsoever for borrowing other than minor amounts in the process of its day-to-day activities. Thus the occasional ability of the government to raise revenue beyond its expenditures in any one year is reflected in an increase in its bank deposits which are held to meet any future needs. The use of these deposits due to lack of sufficient revenue to cover its expenditure is illustrated twice during our period: in 1951 and in 1963 (see Table XXXI). During both of these years the government was unable to raise sufficient revenues to finance its expenditures and therefore its bank deposits were resorted to. Government deposits can thus be regarded as monetary balances held for "precautionary" or "transactions" purposes, which therefore come within our measure of money supply. The important point to keep in mind in this respect is that the government held its bank deposits as a result of a behavioural rather than a policy decision.

Now to return to Table XXXI, we can see that total money supply as we have defined it increased by over five-fold during 1959-1966. In its increase, this money supply underwent a change in its composition which reflects the general development of the banking habit: a fall in what is called the "currency ratio", i.e. the ratio of currency to the total money supply.[1] From a ratio of currency to total money supply of about 50 per cent at the outset of the period, the currency ratio falls to about one third towards the close of the period. The development of the banking habit is mainly reflected in the increase in private time and saving deposits.[2] The tremendous increase in the volume of these deposits can serve to indicate, amongst other things, the price stability that prevailed during our period and the confidence of the public in the banking system. However, before we attempt to examine the interrelationships between this rapid monetary expansion and the various sectors of the economy, let us first examine factors affecting this increase in money supply.

(b) Factors Affecting Money Supply. - From Table XXXII we can see the main factors behind the expansion of the money supply that occurred during our period. As we have already stated, although the

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1. The question of the decline in the currency ratio in the course of development has been examined in various empirical studies. For a comprehensive analysis of this question see J.D. Khazzoom, The Currency Ratio in Developing Countries (New York 1966).

2. The development of banking as such is examined in Chapter [illegible] where it can be seen that a tremendous increase in the number and spread of bank offices occurred during our period.

money supply was, in virtue of the currency system which was adopted, closely linked to the balance of payments, the link could however be greatly modified by the behaviour of the banks. But, also as we have already stated, the behaviour of the banks in Jordan conformed harmoniously with the adopted currency system, and we shall presently see the evidence in this respect. As far as the balance of payments effect on the money supply is concerned, from Table XXXII we can see that a very rapid growth in the all-important item of foreign assets occurred. However it must be emphasized here that not all these foreign assets were held by the currency-issuing authority. Commercial banks were allowed (until towards the end of our period) to hold their own foreign assets which amounted to between one third and one half of the total foreign assets of the country (see Table XXXIII).

From data in Table XXXII the close relationship between changes in foreign assets and changes in money supply becomes evident. In spite of the possible introduction of complications through the commercial banks' credit-creating activities, the monetary system exhibits consistent stability with the correlation coefficient of changes in money supply on changes in foreign assets during 1950-1966 being equal to 0.99. In spite of the tremendous increase in bank credit to the private sector, the factors affecting changes in this credit are to a large extent those governing money supply in the first place: the balance of payments. And credit to the government has been throughout our period a very minor element. Let us now see why, in spite of the

very rapid growth of claims on the private sector, this growth did not disrupt the monetary system.

TABLE XXXII: Factors Affecting Money Supply, 1950-1966

End of Year	Foreign Assets (Net)*	Claims on Government	Claims on Private Sector*	Money
1950	13.8	-	3.5	17.5
1951	12.0	0.2	3.5	16.2
1952	13.0	0.5	3.7	15.9
1953	14.8	0.5	4.2	18.2
1954	17.9	0.5	4.9	21.7
1955	21.8	0.5	6.5	25.7
1956	25.9	0.7	7.5	31.0
1957	26.8	0.7	10.0	34.2
1958	30.7	0.8	10.2	37.7
1959	30.3	0.8	12.4	39.4
1960	30.8	0.9	15.8	43.3
1961	34.4	0.6	18.1	48.0
1962	41.0	0.8	20.3	58.1
1963	34.4	0.9	24.9	54.7
1964	49.3	1.6	29.5	71.0
1965	56.7	2.1	33.7	80.0
1966	64.3	2.6	39.8	92.1

* foreign assets of monetary authority and commercial banks.

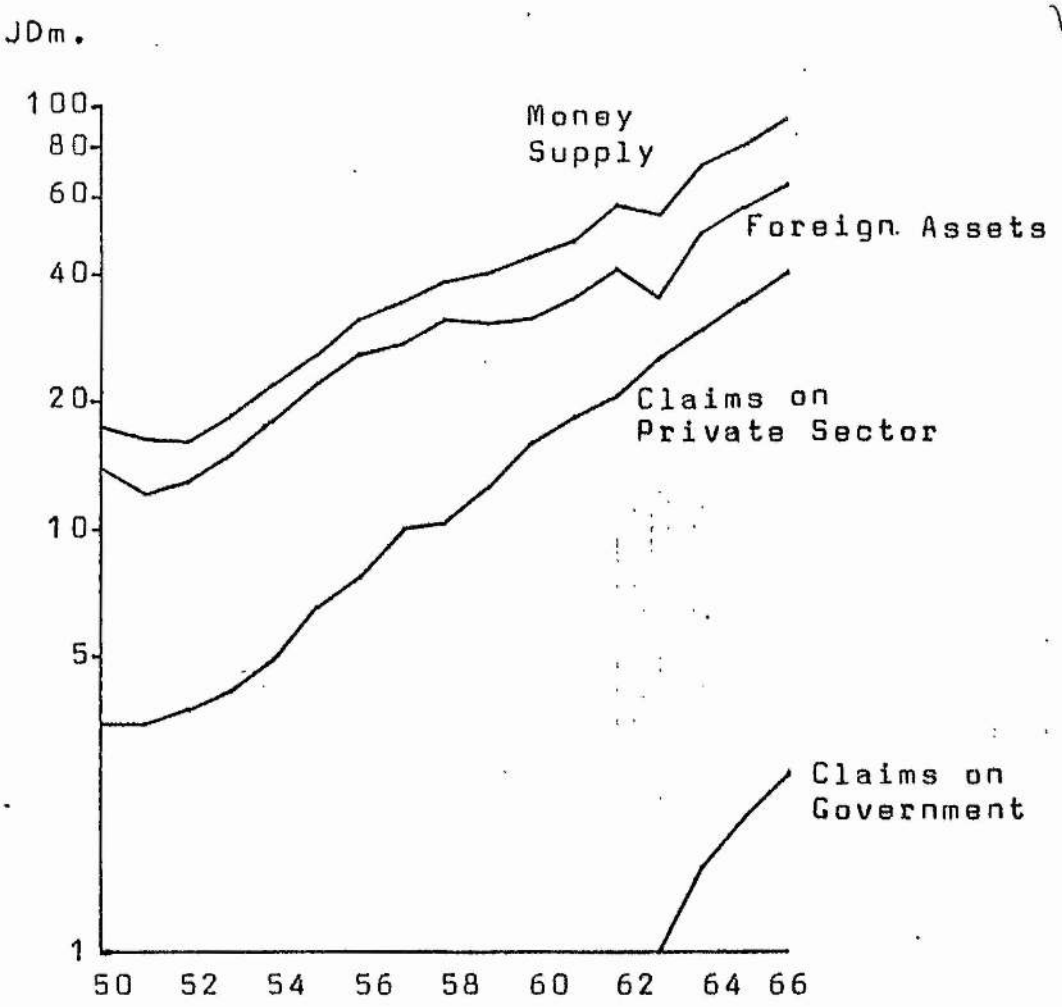
* total loans and advances and bills discounted.

Source: International Financial Statistics, op. cit.

As is shown elsewhere in our study,[1] commercial banks' activities

1. See Chapter VIII, Table IX , which gives details of the sectoral distribution of bank credit.

Figure 1: Factors Affecting Money Supply: Foreign Assets, Bank Credit and Money Supply, 1950 - 1966



Source: Table XXXII.

Note: Prior to 1963 Claims on Government were less than JD1 million.

are mainly confined to the commercial sector. The commercial sector's activities are largely based upon imports which are financed through bank credit. The import trade itself is evidently governed by the balance of payments: in fact such credit advanced to the commercial sector represents the finance of the "leaking out" operation of the monetary mechanism, rather than the finance of inflationary expenditure. Moreover, although bank credit granted to the private sector underwent a rapid growth, throughout our period, except for the last few years, the commercial banks maintained a ratio of reserves to deposits in excess of 50 per cent, bearing in mind the absence of any government control or supervision of their activities. In 1963, as can be seen from Table XXXIII, this ratio falls to 36 per cent as a result of the withdrawal of government deposits during that year (this withdrawal was, as we mentioned previously, to finance the budget deficit of that year). In 1964, a normal year, this ratio rises once more to 50 per cent. However from that year onwards there is a fall in this ratio to about 40 per cent which comes as a result of the transfer of government deposits from the commercial banks to the newly-created Central Bank which acts as banker to the government. Nevertheless, even after this fall, this ratio of reserves to deposits continues to be relatively high.

Now, to sum up our findings so far, we have seen that a very large monetary expansion occurred during 1950-1966. However this expansion was not of an inflationary nature: it was rather achieved

TABLE XXXIII: Reserves and Deposits of Commercial Banks, 1950-1966

End of Year	Cash JDm.	Foreign Assets JDm.	Total Reserves JDm.	Total Deposits JDm.	Ratio of Reserves to Deposits %
1950	0.50	4.71	5.21	9.36	56
1951	0.98	2.67	3.65	8.04	45
1952	1.04	4.21	5.25	9.06	58
1953	0.77	5.49	6.26	10.68	59
1954	1.36	5.39	6.75	12.11	56
1955	1.80	7.49	10.29	16.44	63
1956	2.22	8.36	10.58	17.19	62
1957	0.92	11.25	12.17	20.19	60
1958	1.17	14.40	15.57	23.19	67
1959	0.71	14.28	14.99	25.36	59
1960	0.77	14.27	15.04	29.04	52
1961	1.00	16.08	17.08	33.01	52
1962	1.19	20.31	21.50	40.98	53
1963	1.36	12.04	13.40	37.52	36
1964	1.61	24.73	26.34	52.34	50
1965	8.93*	10.05	18.98	48.48	39
1966	14.83*	7.26	22.09	55.77	40

* includes deposits with Central Bank. From 1965 onwards the commercial banks were required to deposit their foreign assets with the central bank. This is thus reflected in a reduction of their foreign assets and in an increase in "cash" which includes deposits with the central bank in these two years.

Source: International Financial Statistics, op. cit., and Statistical Yearbook, relevant issues.

through the "free" operation of a monetary system which largely precluded any inflationary expansion. Commercial banks' activities and the government's debt policy (or rather the absence of it) conformed

harmoniously to the currency system with its one hundred per cent foreign assets cover. The inflow of foreign resources was more than sufficient to meet the country's foreign exchange requirements (mainly for goods imports) and thus made possible a swift increase in the foreign assets of the country without the need to enforce any exchange or import restrictions (see p. 130 below). This increase in the foreign assets of the country resulted, in virtue of the adopted currency system, in a parallel monetary expansion which, in view of the openness of the economy, could not have been of an inflationary nature. This last assertion will be supported by the evidence of the relevant variables which we shall be examining presently. In fact the monetary mechanism that safeguarded this monetary stability can be seen at work twice during our period: in 1950-1952 and in 1963. During both these periods an excess of foreign payments over receipts resulted in a reduction in the foreign assets of the country which automatically led to a monetary contraction. The first period which occurred soon after the setting up of the monetary system was of a somewhat serious nature and therefore was accompanied by foreign exchange and import controls. However, the inflow of foreign assistance that is sufficient to cover the requirements of the economy allows the system from then onwards to function smoothly and in an upward trend without any restrictions on imports. Not until 1963 do we get another instance of excess payments over receipts and a monetary contraction: but this, unlike the earlier period, was of a

very temporary duration and was soon overcome without any resort to import controls. We shall now turn to a fuller examination of factors at work behind these overall monetary trends which we have so far been describing.

(4) Money, Prices, Imports and Domestic Output

The quantity of money as we have seen increased at a very rapid rate during 1950-1966. Such an increase can, theoretically speaking, be put to a number of uses: it can be utilized to purchase additional real domestic output and/or imports if they were forthcoming; it can be utilized to purchase assets other than goods (e.g. securities and real estate); or it can simply go to increase the public's holdings of money. Prices are pushed up to the extent that these factors fail to absorb or accommodate the increase in money supply. The data which we have for Jordan relating to these factors do not make possible a precise evaluation of the exact rôles of these various variables in absorbing the increased supply of money. However, useful indications can be obtained which will clarify and spell out the overall trends in the economy during our period. Let us first look at prices during our period.

(a) Money and the Price Level. - The immediate fact that transpires from whatever data we have on the price level is that prices were far from being the major accommodating factor for the increase in money supply during our period. This is important in so far as it

tells us to look elsewhere for the effects of this monetary expansion. In the first part of this chapter we examined two sets of data relating to the price level in Jordan: the wholesale price index, and the cost of living index for civil servants. The former is more appropriate for our purposes here as the latter gives changes in the cost of living as between 1968 and 1958 only, i.e. no data are given for the period in between these two years. In Table XXXIV we can see the indices of money and prices which serve to indicate quite clearly that the impact of the expansion in money supply did not fall primarily upon the price level, as would have happened if "other things" were equal. If that was the case, i.e. if such a large increase in the quantity of money in such a short period affected mainly the price level, then even a cruder measure of the price level than the one we have here would have recorded a substantial rise.

As can be seen from Table XXXIV and Figure 2, our period opens with a monetary contraction: the quantity of money falls during both 1951 and 1952. Although our price data do not cover this initial period, other available data in this respect indicate falling prices during both 1952 and 1953 as compared with 1951.[1] In fact such a trend of falling prices can be discerned in the area in general, its cause being readjustments following the post-Korean War boom. In Jordan, moreover, the high prices caused by the Korean boom were

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1. See IBRD, The Economic Development of Jordan, pp. 61-63 and 445-449.

TABLE XXXIV: Indices of Money and Prices, 1950-1966 (1954 = 100)

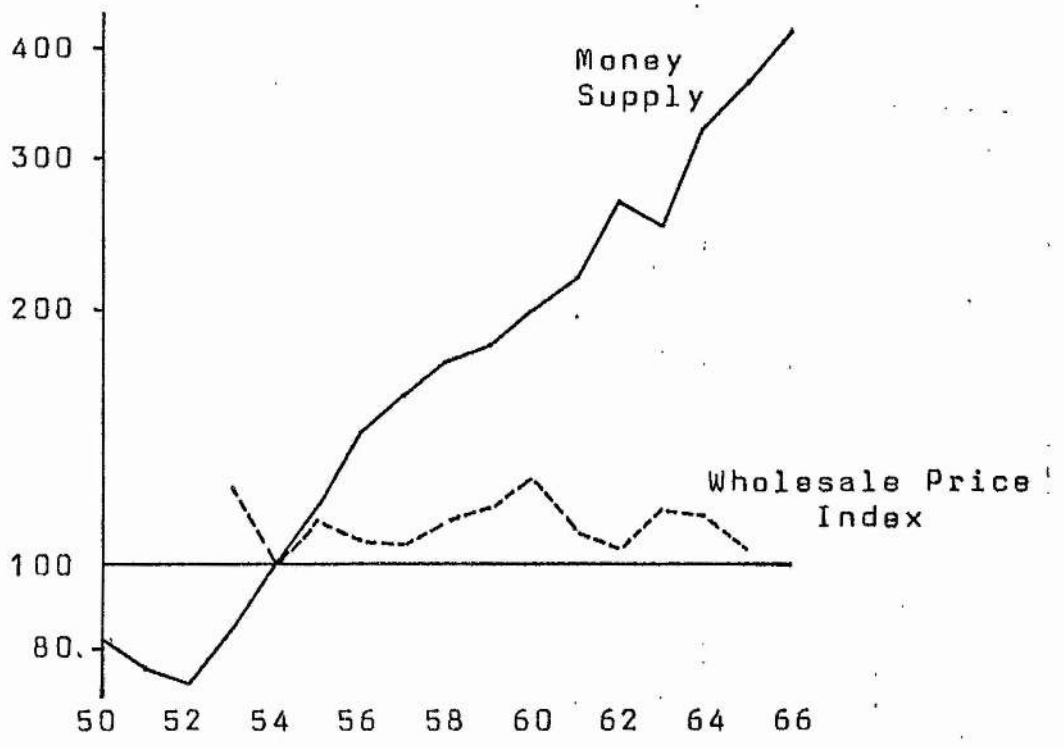
Year	Money Supply	Amman Wholesale Price Index
1950	81	n.a.
1951	75	n.a.
1952	73	n.a.
1953	84	124
1954	100	100
1955	118	114
1956	143	108
1957	158	106
1958	174	113
1959	182	116
1960	200	126
1961	221	109
1962	268	105
1963	252	116
1964	327	114
1965	369	104
1966	424	

Source: data on money supply from Table XXXI above.
Note:- Amman Wholesale Price Index as given in the Statistical Yearbook has 1953 as a base. Here the base is converted to 1954 = 100 as 1954 was the first year for which there were income estimates in Jordan which we will be looking at shortly in relation to the above data.

further pushed up by the exchange shortages and inadequate imports following the events of 1948. In fact what is happening here illustrates vividly the workings of the monetary system: our period opens with shortages resulting from an excess aggregate demand that could

Figure2: Indexes of Money and Prices 1950-1966

(1954 = 100)



Source: Table XXXIV.

not be satisfied by sufficient imports because of the inadequacy of foreign exchange. Thus while prices are high, foreign exchange reserves are run down in return for imports. This simultaneously helps to moderate price rises and reduces the quantity of money in accordance with the currency system. However after 1952 the pressure on the foreign exchange reserves is reduced as a result of increased foreign assistance which in fact becomes more than sufficient to meet foreign exchange requirements. Thus, while this neutralizes pressures on the price level (which reaches a low point in 1954) it increases the supply of money as the foreign exchange reserves are built up. From then onwards the quantity of money shows a sustained upward trend throughout the period (except for 1963) without the need for any exchange or import controls which are relaxed from the mid-fifties. Throughout this rapid monetary expansion the wholesale price index remains at a fairly stable level which is in fact below its initial high level. Foreign exchange receipts are more than adequate to meet any potential excess demand or to make good any deficiency in supply such as would result from crop failures.

Thus if prices did not move in accordance with the change in the quantity of money during this period, then changes must have occurred in "other things" to accommodate this monetary expansion.

(b) Imports. - We next turn to imports. The rôle of imports during our period has been already touched upon extensively in virtue of their key position in the economy. We have already mentioned how

imports acted effectively as an outlet for any inflationary pressures within the economy. Here we shall attempt to see in more precise terms the rôle of imports in relation to the monetary expansion that occurred. The behaviour of imports can be assessed from examining their ratio to income and their ratio to money during our period.[1] Table XXXV gives us details of the propensity to import (or the ratio of imports to income) and the ratio of money to imports. The first point to be noted is the relatively high level of the propensity to import which stands at over 0.40 throughout the period.[2] This indicates the extent of the openness of the economy and its dependence upon imports. However, more important for our purposes here is the variation that occurred in this ratio during the years under consideration.

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1. J.J. Polak uses the ratio of imports to money as a tool of analysis in his article, "Monetary Analysis of Income Formation and Payments Problems" (International Monetary Fund, Staff Papers, Vol. VI, No. 1 /November 1957/, pp. 1-50). Professor Edith Penrose also makes use of this ratio in her article "Money, Prices and Economic Expansion in the Middle East, 1952-1960," (Rivista Internazionale di Scienze Economiche e Commerciale, Vol. IX, No. 5 /1962/, pp. 402-427), in which she analyses monetary trends in Egypt, Syria, Lebanon, Iraq, Iran and Turkey.

2. This ratio compares with that of Lebanon which has the highest such ratio (between 0.36 and 0.54 during 1952-1958) amongst the six countries examined by Professor Penrose. In contrast Turkey has a ratio of imports to income of between only 0.03 and 0.13 and Syria between 0.23 and 0.30 during roughly the same period (E. Penrose, op. cit., p. 419).

TABLE XXXV: Ratios of Imports to Income 1954-1966 and Money to Imports 1950-1966

Year	Imports JDm.	GDP JDm.	Money Supply JDm.	Ratio of Imports to GDP	Ratio of Money to Imports
1950	10.8		17.5		1.62
1951	15.7		16.2		1.03
1952	17.3		15.9		0.92
1953	18.4		18.2		0.99
1954	19.8	52.4	21.7	0.38	1.10
1955	27.1	47.9	25.7	0.57	0.95
1956	27.8	66.6	31.0	0.42	1.12
1957	30.5	67.6	34.2	0.44	1.12
1958	34.0	78.0	37.7	0.44	1.11
1959	40.3	85.2	39.4	0.47	0.98
1960	42.9	89.4	43.3	0.48	1.01
1961	41.9	110.9	48.0	0.38	1.15
1962	45.6	108.6	58.1	0.42	1.27
1963	50.9	117.7	54.7	0.43	1.07
1964	53.6	135.5	71.0	0.39	1.32
1965	56.1	151.0	70.0	0.37	1.43
1966	68.2	149.7	92.1	0.46	1.35

Source: Imports data from Statistical Yearbook, relevant issues; data for GDP and Money Supply already given in thesis.

The relationship between imports and income which we are about to investigate is especially meaningful in the case of Jordan where it comes, in virtue of the mild restrictions on imports, quite close to a "behavioural" propensity and not a mere ex-post statistical calculation. As Professor Penrose has pointed out, when imports are

not being freely permitted it is a common, though misleading, practice to call the ratio of imports to income a "propensity" whereas in fact it is an "ex-post statistical calculation showing what happened".[1] Import and exchange controls were relaxed in Jordan from the mid-fifties onwards. Import licences could be obtained on application throughout our period and whatever restrictions were imposed were for raising revenue (through import duties) or for protective purposes but did not come anywhere near the severe restrictions that were initially imposed to safeguard the foreign exchange reserves.

The data contained in Table XXXV reveal two different periods in the behaviour of imports relative to income, from 1954 and up to 1960 the propensity to import tends to be at a higher level than during the period 1961-1966 (see also Fig. 3). Furthermore, when we look back at our data for prices, we can discern that the wholesale price index shows during 1954-1960 a tendency to be at a higher level (although slightly) than during 1961-1965 (see Fig. 2). Thus, keeping in mind that money supply shows a sustained upward trend throughout 1954-1966, there are indications that the increase in the quantity of money was acting more effectively upon imports and prices during 1954-1960 than it did during 1961-1966. In other words, during the latter period "other factors" were more effectively absorbing the increase in money supply than they managed to do in the earlier period. This is further confirmed by reference to the second variable we are

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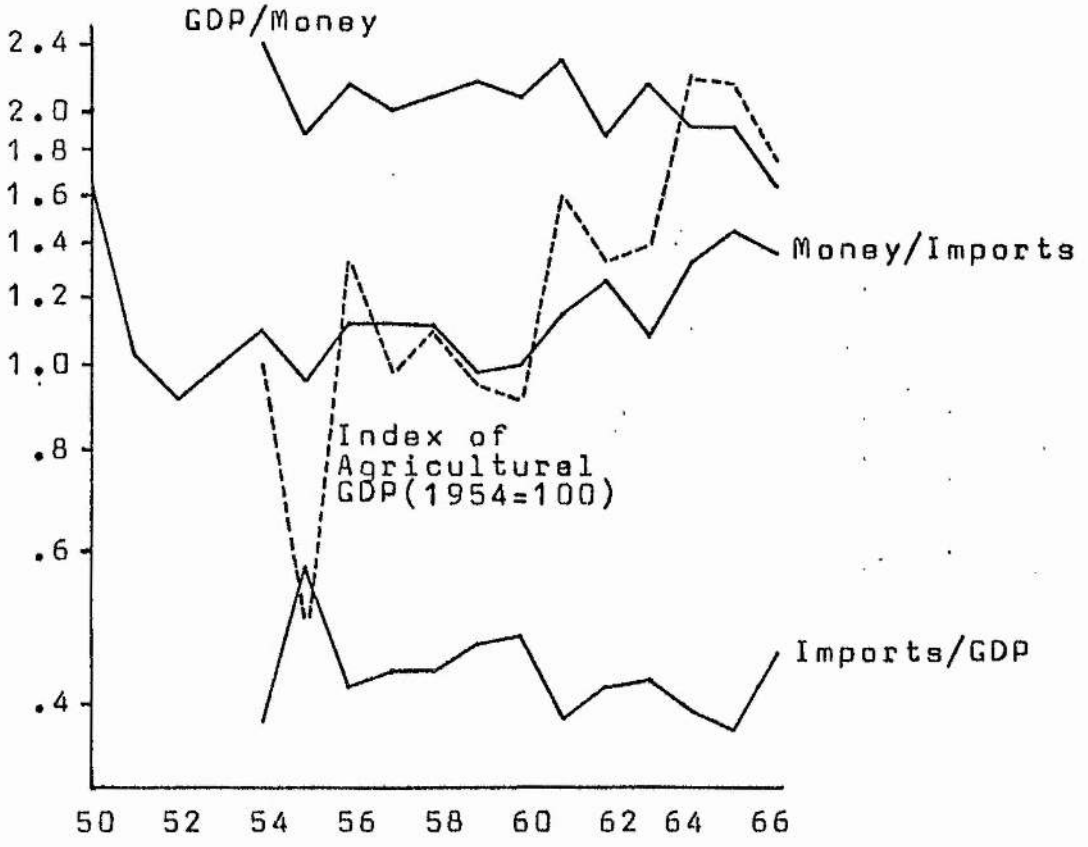
1. Ibid., p. 423.

Figure 3: Ratios of GDP to Money, Money to Imports, Imports to GDP in Relation to Agricultural Product, 1954-1966



Source: Data already given in various tables.

examining in connection with imports, viz., the ratio of money to imports. This ratio tends to be at a higher level during the latter period than during the earlier one (see also Fig. 3). This indicates that imports were increasing more rapidly relative to money supply during the fifties than they did in the sixties. Thus the increase in the quantity of money was being more effectively absorbed by "other factors" during the sixties than during the fifties. We now try to find out what these other factors were, and the reasons behind the apparent change in their performance which has been so far indicated.

(c) Domestic Output. - In our outline of the monetary system in Jordan earlier on in this part of our study we described our period in Jordan as being one of monetary expansion of a special type. Whatever increase in the quantity of money did not "leak out" in return for imports (as it could freely have done) was a residual held or kept within the economy primarily in consequence of either increased domestic output, or increased demand for securities - the money thus remaining in financial circulation -, or increased demand for money to hold. In our examination of prices and imports in relation to money during our period we saw that during the sixties the economy seems to have been able to retain or keep within it a larger proportion of the increase in the quantity of money. The "leaking out" of the monetary expansion through the inflow of imports was more pronounced in the fifties than in the sixties. Why?

An examination of trends within the productive sectors of the economy will reveal that changes in trends in the agricultural sector

accompanied these variations in the impact of the monetary expansion. During the fifties, as we shall see in the relevant part of our study dealing with agriculture, the output of the agricultural sector was expanding at a much lower rate than it did during the sixties. The factors behind this will be adequately examined in the appropriate part of the thesis, but it will suffice here to say that the domestic sectors of the economy were as a result more successful in meeting the monetary expansion through increased real output than through other possible channels (e.g. prices or imports) during the sixties than during the fifties. In fact, net food imports were rapidly rising during 1954-1960 as compared with 1961-1966: value added in the agricultural sector was nearly constant during the earlier period in contrast to its rapid growth during the sixties. In Figure 3, the index of agricultural GDP is superimposed upon the other variables which we have been so far examining. This indicates that the period during which agricultural output failed to expand was the same period during which the ratio of imports to income was relatively high and the ratio of money to imports was relatively low. The demand for food which was increasing at a rapid rate throughout 1954-1966 (through the rapid growth of income originating from secondary and tertiary activities) was met more through imports during 1954-1960 than through the expansion of domestic production. In contrast, during 1961-1966 domestic agriculture becomes much more successful in meeting the rapidly rising demand for food. At this juncture, however, one asks the question: If trends in the agricultural sector were such as we

have described, why should trends in the relationship of money to imports and imports to income be affected in the manner we have previously seen? Or in other words why should the propensity to import fall and the ratio of money to imports rise as a result of the agricultural trends we have just described? Why did the additional income accruing to the agricultural sector not "leak out" in return for additional imports? This takes us to the consideration of the remaining factors related to the quantity of money, viz., the demand for securities and other financial investments; and the demand for money to hold, which can be examined in terms of what is normally called the income velocity of circulation or the ratio of income to money.

(d) The Income Velocity of Circulation. - Table XXXVI gives us details of the ratio of income to money in Jordan during 1954-1966. From this table, and from Figure 3, it can be seen that there was a tendency for this ratio to decline, and especially in the latter part of the period from 1961 onwards.

Various empirical studies indicate a secular decline in the income velocity of circulation, especially in the case of developing countries where there is the added influence of the increased monetization of the economy.[1] Professor Edith Penrose has put forward a

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1. Cf. John G. Gurley, "Financial Structures in Developing Economies," printed in David Krivine (ed.), Fiscal and Monetary Problems in Developing States (New York 1967), pp. 99-120. See also R.T. Selden, "Monetary Velocity in the United States," printed in M. Friedman, op. cit., pp. 179-257.

TABLE XXXVI: Income Velocity of Circulation, 1954-1966

Year	Money Supply JDm.	GDP JDm.	Ratio of GDP to Money
1954	21.7	52.4	2.42
1955	25.7	47.9	1.86
1956	31.0	66.6	2.15
1957	34.2	68.6	2.00
1958	37.7	78.0	2.07
1959	39.4	85.2	2.16
1960	43.3	89.4	2.07
1961	48.0	110.9	2.31
1962	58.1	108.6	1.87
1963	54.7	117.7	2.15
1964	71.0	135.5	1.91
1965	80.0	151.0	1.89
1966	92.1	149.7	1.63

Source: basedon data already given.

number of possible factors behind the decline in velocity in the neighbouring countries of Iraq, Syria and Lebanon during 1952-1960: a rise in personal savings held in a liquid form; unstable political conditions giving rise to increased holdings of money for precautionary or speculative reasons, and finally increased monetization of transactions as a result of development.[1]

Now as far as Jordan was concerned the above three influences could as well have been operative. Indeed they may well have been

1. Edith Penrose, op. cit., pp. 421-422.

enhanced in their effect by the particular trends in agricultural production which we have already outlined. A more rapid expansion of agricultural output in the sixties would in the first instance result in the switching of expenditure on food from imports to home production, for as we saw imports came in usually to meet any deficiency in supply. Thus that part of income that would have "leaked out" in return for food imports (as occurred in the fifties) went instead to the agricultural sector. The ultimate effect on velocity would of course depend upon the use to which the farming sector put their additional income. The available data indicate that such additional income was held in money form rather than being spent on additional purchases. This would in fact be consistent with the farming sector regarding its additional income largely as a windfall gain which they were content to hold in liquid balance, especially if we bear in mind the absence of close and ready substitutes for money on the one hand, and on the other hand the rapidity of the expansion of agricultural production in such years as 1964-1965 and the unusually favourable weather conditions that were partly responsible for this rapid growth. Here we come to an important monetary aspect in the developing countries, viz., the absence of a true money or capital market as compared with the developed countries.

In Jordan during our period, as in many of the developing countries, there has not been that wide range of assets between money on the one hand and physical assets (such as real-estate) on the other: between currency and real assets in Jordan there are only such

substitutes as bank deposits, and more recently, shares of the few joint-stock industrial companies. In fact the swift growth of such items as bank deposits (especially time and saving deposits - see Table XXXI) plus the sizeable contribution of small shareholders to the total capital of joint-stock companies may be considered as an indication of the absence of suitable intermediaries for mobilizing personal savings.[1] As Polak has pointed out, "In most of the less developed countries, the transition from money to other assets is fairly abrupt. On the one hand there is money; on the other hand there are real assets . . . there is little in between."[2]

It is in fact for this reason that so far in this part of our study no mention has been made of interest rates, for there has not been in Jordan the developed money market in which an interest rate is formed by the interplay of the forces of the market. Whatever interest rates existed were those determined by the commercial banks: rates between 6 per cent and 9 per cent being charged on advances depending upon the borrower, and rates of between 3 per cent and 6 per cent being granted on time and saving deposits. Not until recently (in fact after the end of our period) was a start made on developing the money market. Thus the Central Bank fixed a legal maximum interest rate of 9 per cent; a discount rate of 5½ per cent (which was reduced

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1. This is analysed in Chapter VIII , where the structure of shareholding in joint-stock companies is examined.

2. J.J. Polak, op. cit., p. 39.

to 5¼ per cent in April 1967) was issued by the Bank for the first time in 1967, and a start was made on developing a market for treasury bills which started to be sold at a discount equivalent to 5.16 per cent per annum. Thus the government is taking steps to develop a financial market that can cope more adequately with the financial needs of economic development.

To sum up, we have seen that a very rapid increase in the quantity of money occurred in Jordan during our period. The inflationary effects of such a monetary expansion were largely removed through the inflow of imports and a decline in the income velocity of circulation. The latter became especially effective in the latter part of our period when, as we saw, agricultural production was much more rapidly expanding. The decline in velocity in this latter part of our period not only reduced the impact of the increase in money supply on the price level, but seems to have reduced the impact of monetary expansion on imports, as in the latter period the propensity to import declines as compared with the earlier period in spite of the continued monetary expansion. Increased personal savings (in cash or other monetary forms such as time and saving bank deposits which we have included in our definition of money) plus the possible increased purchases of real-estate (for lack of other intermediaries like government bonds or treasury bills) were, it seems, absorbing the increase in the quantity of money. Although this has contributed to reducing the impact of the increase in money supply on prices and imports, it ought to be kept in mind that such a phenomenon

simultaneously points out to a lack of adequate intermediaries for channelling personal savings into productive investments. This question is further discussed in that part of our study dealing with the finance of development.

CHAPTER IV

CHAPTER IV:

AGRICULTURE

(1) Land Use

The rain-belt, as already indicated at the outset of our study (Chapter I), is the main determinant of agricultural activity in Jordan. Only 6 per cent of Jordan's total area of about 97,000 square kilometres receives an average annual rainfall (300 mm. or more) that is sufficient to permit cultivation. Estimates of cultivated area indicate that out of a total cultivable area of about 10 million dunums[1] between five and six million are cultivated in any one year, the remaining area being either left fallow or out of cultivation altogether. As can be seen from Table I, there has been little change in this respect since the early fifties.

The data for 1953 are derived from the agricultural census of that year,[2] and figures for 1965 are based on the estimates of the Ministry of Agriculture and on the agricultural census of that year[3] as indicated in the table. The figures are not strictly comparable:

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1. 1 dunum = 1,000 sq. metres = $\frac{1}{4}$ acre approximately.
2. Department of Statistics, 1953 Census of Agriculture (Amman, n.d.).
3. Department of Statistics, Report on Agriculture Census 1965 (Amman 1967).

the 1953 census refers to holdings of more than 10 dunums and does not give any clear definition of terms - e.g. the figure it gives for the irrigated area seems to refer, as indicated in the FAO report, to any land possessing some water rights. The 1965 census, as indicated in its report,[1] seems to have understated the area of agricultural holdings. And the data given by the Ministry of Agriculture are based on the estimates collected by extension agents and statistics inspectors from village heads or leading farmers. Nevertheless, comparison between the various figures helps to indicate that no major change has occurred during this period as far as the total cultivated area is concerned. Indeed one can readily assess the reasons behind this apparent lack of change by examining the basic factors at work within this sphere.

TABLE I: Agricultural Land Use 1953 and 1965 (000 dunums)

	1953 Census	1965 Estimate	1965 Census
Unirrigated Crops	5051	6009	4962
Irrigated Crops	759*	323	443
Total Cropped Area	5810	6332	5405
Fallow	3064	..	..
Cultivated Area	8874	10,400	..
Land Registered as Forest	1114	1315	..

Source: Food and Agricultural Organization Mediterranean Development Project, Jordan Country Report (Rome 1967), p. 45.

* lands having water rights but not necessarily irrigated.

1. Ibid., p. 17.

As we have already seen in Chapter I, the margin of cultivation was successively extended from the nineteenth century onwards until it reached the limits of cultivation by the end of the Second World War. Accordingly although our period opened with the upheaval of 1948 there was little scope left in Jordan for simply extending the margin of cultivation to meet the sudden increase in population. Agricultural production could be expanded only through the development of intensive irrigated farming rather than through the simple extension of the margin of cultivation as occurred in the period up to the end of the Second World War. And evidently such a development would be little reflected in the figures relating to the total cultivated area. On the one hand no addition to the cultivated area occurs if intensive farming is developed on previously (extensively) cultivated lands; and on the other hand, whatever previously uncultivated land is subsequently reclaimed and put under intensive farming tends to amount in practice to only a minor fraction of the huge tracts of land upon which extensive farming occurs (e.g. the total area of the major irrigation scheme in the Jordan Valley comes to only 120,000 dunums; this compares with a total cultivated area in Jordan of about five million dunums). The latest estimate of the total irrigated area (Table II) puts it in 1966 at 360,000 or about 6 per cent of the total cultivated area.

Although the figures in Table II are not comparable with the total figure for 1953 given in Table I (which, as we stated, refers to land having water rights), the extent of the expansion of irrigated

TABLE II: Irrigated Area by Source of Water 1966 (dunums)

Area	Ground Water	Springs	Side Wadis	Yarmouk & Jordan Rivers	Total Irrigated	Total Fully Irrigated
Jordan Valley	35,000	10,000	87,000	175,000	307,000	264,000
Southern Rift Valley			26,000		26,000	26,000
West Bank (coast)	15,000				15,000	15,000
Eastern Plateau	7,000	5,000			12,000	5,000
Total	57,000	15,000	113,000	175,000	360,000	310,000

Source: FAO, op. cit., p. 55.

farming is indicated by the fact that the Jordan Valley (which was largely uninhabited and uncultivated at the outset of our period) contained by 1966 more than 85 per cent of the irrigated area as can be seen from Table II. In fact the Jordan Valley represents the main potential for the development and further expansion of intensive farming through exploiting the waters of the main rivers in Jordan (the Jordan River and its tributary the Yarmouk) and the waters of the side wadis draining into the Valley. And although the area irrigated and cultivated in the Jordan Valley is relatively very small in comparison with the total cultivated area in Jordan, the development of agriculture in the Jordan Valley has played a major rôle in the expansion of agricultural output that occurred during our period and which we shall

presently be examining. The development of cultivation in the Jordan Valley itself will be examined separately in this part of our study, and before we proceed to examine trends in agricultural production we take a look at data in Table III relating to the geographic distribution of the cultivated area (refer to map in Chapter II showing various districts in Jordan).

TABLE III: Cultivated Area by Districts, 1953 and 1965

(drm. = dunums)

District	Field Crops (including Vegetables)				Fruits, Vines and Olives				Total				Vegetables 1965	
	1953		1965		1953		1965		1953		1965			
	000 drm.	%	000 drm.	%	000 drm.	%	000 drm.	%	000 drm.	%	000 drm.	%	000 drm.	%
Amman	764	15	1040	22	13	2	22	3	776	13	1062	20	35	9
Balqa	559	11	220	5	18	3	23	3	578	10	243	4	47	11
Irbid	1371	27	1623	35	60	9	112	15	1431	25	1735	32	152	36
Ma'an	277	5	126	3	3		4	1	280	5	130	2	04	
Kerak	547	11	707	15	7	1	11	1	555	9	718	13	31	7
Hebron	301	6	214	5	23	3	37	5	324	6	250	5	9	2
Jerusalem	383	7	251	5	204	30	160	21	586	10	411	8	17	4
Nablus	924	18	480	10	356	52	375	51	1281	22	856	16	130	31
Total	5126	100	4662	100	684	100	742	100	5810	100	5404	100	422	100

Source: 1953 Census of Agriculture, pp. 13-17; Report on Agriculture Census, p. 84. Note:- dunumages may not add up because of rounding.

Now in spite of the non-comparability of the data of the censuses of 1953 and 1965 for reasons already mentioned, the data in Table III are useful in as far as they firstly indicate the relative importance

of the various districts of the country in terms of the percentage of the cultivated areas they contain, and, secondly, help to reveal any major changes that may have occurred. Thus if we focus our attention on percentages rather than on absolute figures, then we can see that in both 1953 and 1965 the west bank contains the larger part of the area of fruits, vines and olives with Nablus district alone having about a half of the total of this area in both years. Nevertheless, Irbid district (within which the northern Jordan Valley lies) seems to have increased its share of this area under fruits, vines and olives from 9 per cent in 1953 to 15 per cent in 1965. And as far as vegetables are concerned the figures (which we have for 1965 only) indicate that Irbid district had the largest share (36 per cent) of the total area under vegetables in reflection of the rapid development of this type of cultivation in the Jordan Valley. Field crops on the other hand are mainly cultivated in the rain-fed zones of the east bank which contain 69 per cent in 1953 and 80 per cent in 1965 of the total area cultivated by these crops (including the area of vegetables, for lack of detail). Thus the sharp contrast existing at the outset between the west bank (containing most of the area cultivated by vegetables and fruits, vines and olives) and the east bank (containing most of the rain-fed area and very little fruits and vegetables) has been somewhat reduced through the development of intensive farming in the east Jordan Valley. In fact the east bank district containing the main rain-fed area (Irbid) became by 1965 an important area for the cultivation of vegetables and, to a lesser

degree, cultivation of fruits. This fact ought to be kept in mind as it is of importance in explaining the pattern of distribution of the agricultural population and labour force amongst the various districts of the Kingdom which we shall be examining later in this part of our study.

(2) Trends in Agricultural Production

(a) Value of Output. - We start by examining details of GDP originating in the agricultural sector as divided between its various sub-sectors (Table IV). From these data we can see that the larger part of agricultural product originates in four main sub-sectors: grains and legumes; vegetables; fruits, vines and olives; and animals and animal products. An idea of the main items within these and the other sub-sectors can be obtained from Table IVa, which contains a breakdown of agricultural product for the year 1966, thus indicating the more important crops and other items such as livestock and their products.

Now when we focus our attention on total agricultural product during 1954-1966 we can readily notice sharp and continuing fluctuations in its level throughout the period. Furthermore, what attracts our attention is that in the first half of our period agricultural output seems to fluctuate around a static level, while in the latter part and from 1960 onwards fluctuations seem to occur around a rapidly rising level (see Fig. 1(a)). In fact an estimate of the linear trend of agricultural GDP during 1954-1960 yields an annual rate of

TABLE IV: Details of Agricultural production at Current Farm Prices, 1954-1966 (JD million)

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Grains and Legumes	7.0	2.9	7.7	6.5	2.5	3.1	2.1	5.7	4.5	3.1	10.8	10.1	4.2
Vegetables	3.2	2.4	3.3	4.0	5.2	5.2	5.7	7.9	6.9	7.4	8.6	9.0	5.7
Tobacco	0.2	0.2	0.4	0.4	0.3	0.4	0.1	0.4	0.3	0.1	0.4	0.4	0.3
Fruits, Vines & Olives ..	2.3	1.1	2.1	1.5	3.8	2.6	2.8	9.0	3.4	5.3	7.9	5.7	7.5
Forest Products	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1
Sales of Animals	3.4	3.3	3.6	5.1	7.9	4.2	3.4	2.5	2.3	3.4	3.4	4.2	6.2
Animal Products						3.8	2.8	2.6	2.7	3.1	2.9	3.5	4.0
Poultry, Game & Honey ..	0.5	0.5	0.5	0.5	0.5	1.1	1.2	1.3	1.6	1.7	2.1	2.7	2.8
Fish	-	-	-	-	-	0.01	0.03	0.03	0.04	0.04	0.04	0.04	0.04
Construction on Farms (labour)	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.2	0.1	0.3	0.2	0.2	0.5
	17.1	10.8	19.3	18.6	20.4	20.8	18.3	29.7	22.1	24.5	36.4	36.0	31.5
Change in Livestock Nos. .	0.6	-1.4	3.6	-1.0	-1.0	-3.2	-1.2	-1.4	2.0	0.9	1.4	2.8	1.2
	17.7	9.4	22.9	17.6	19.4	17.6	17.2	28.3	24.1	25.4	37.9	38.7	32.7
Less Costs ofProduction ..	1.9	1.6	2.1	2.2	2.2	2.5	2.5	3.0	3.2	3.3	3.7	4.6	5.0
Net Output	15.9	7.9	20.8	15.4	17.2	15.1	14.6	25.3	20.9	22.1	34.1	34.1	27.7

Source:- 1954-1958: R.S. Porter, op. cit., pp. 3-4; 1959-1966: Department of Statistics, The National Accounts 1959-1966, p. 27. The discrepancy between the two series (mainly in the "sales of animals" and the "costs of production" items) is adjusted as explained in the note to Chapter III, Part One (pp. 101-103 supra).

TABLE IVa: Output & Value of Agricultural Products at Farm Prices (1966)

Product		Output ('000 tons)	Value JD m.	Percentage of total value	
GRAINS & LEGUMES: ..	Wheat	101.1	2.97	70	
	Barley	28.8	0.43	10	
	Lentils	11.0	0.39	9	
	Others	14.7	0.45	11	
		155.6	4.24	100	14.2%
TOBACCO		1.6	0.30	100	1.0%
VEGETABLES:	Tomatoes	144.6	1.87	33	
	Eggplant	50.4	0.58	10	
	Cucumbers	15.4	0.47	8	
	Watermelons	41.0	0.44	8	
	Others	121.2	2.37	41	
		382.6	5.73	100	19.2%
FRUITS, VINES & OLIVES:	Olives	32.7	1.64	26	
	Citrus	57.2	1.70	27	
	Grapes	61.9	1.28	20	
	Bananas	16.8	0.67	10	
	Others	38.1	1.05	17	
		206.4	6.34	100	21.3%
Total Crops		746.2	16.61		55.7%
FORESTRY PRODUCTS		- -	0.14	100	0.5%
SALE OF ANIMALS ('000):	Sheep	344	2.53	41	
	Goats	350	2.06	34	
	Others	78	1.56	25	
		743	6.15	100	20.7%
LIVESTOCK PRODUCTS: ..	Milk	63.2	3.46	86	
	Sheep wool	2.3	0.45	11	
	Goat hair	0.4	0.10	3	
		- -	4.01	100	13.5%
POULTRY:	Eggs (Million)	145.5	1.75	63	
	Chicken meat	4.5	0.98	35	
	Others	- -	0.06	2	
		- -	2.79	100	9.4%
HONEY		0.03	0.05		0.2%
FISH		0.20	0.04		0.1%
GRAND TOTAL		- -	29.79		100.0%

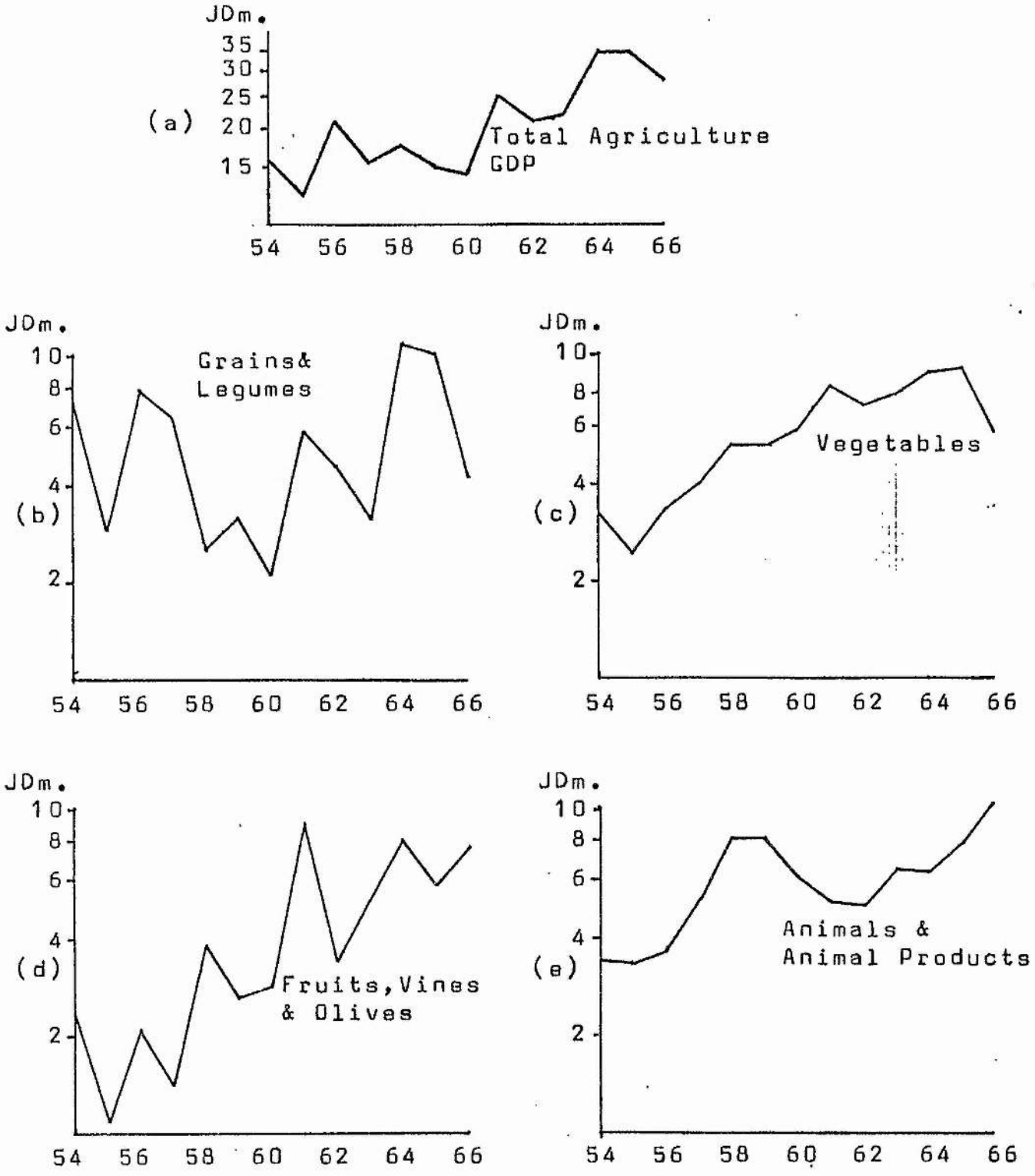
Source: FAO Mediterranean Development Project, Jordan Country Report (Rome 1967), p. 49.

Note: The total given here differs from that given in Table IV because of the exclusion of value added by construction on farms (JD 0.5 m.) and a discrepancy of JD 1.2 m. in the value added in the Fruits, Vines & Olives sub-sector.

growth of agricultural output of only 1.8 per cent per annum; this contrasts with the 3.5 per cent annual growth rate which is obtained from a similar estimate for the period 1960-1966. What are the reasons behind this sharply differing performance in the agricultural sector during these years?

In analysing factors underlying these differing trends we look at the components of agricultural production and, specifically, we examine the four main components or sub-sectors which together account for the larger part of agricultural output throughout our period. When we examine each of these sub-sectors separately we can see that all of them exhibit rising, though fluctuating, upward trends except in the case of the Grains and Legumes sub-sector (see Fig. 1(b), (c), (d) and (e)). In fact this latter sub-sector shows a declining trend during 1954-1960, which is subsequently reversed so that in the sixties the output of the sub-sector exhibits a rising trend in conformity with the other three main sub-sectors (Fig. 1(b)). Thus as a first step we can see that the semi-static or very slowly rising total agricultural output in the first part of our period is associated with a declining output in the Grains and Legumes sub-sector. In fact total agricultural GDP is prevented from declining during the fifties as a result of the upward trends in the other agricultural sub-sectors: a combination of rising incomes in the three sub-sectors of 'Vegetables', 'Fruits, Vines and Olives' and 'Sales of Animals and Animal Products', with a sharp decline in the fourth, 'Grains and Legumes', sub-sector, about cancel each other out, leaving a gently rising trend of total agricultural output. In contrast, the reversal of trend in the 'Grains and Legumes' sub-sector and the maintenance of

Figure 1: Value Added in Agriculture, 1954-1966



Source: Table IV.

the previous upward trends in the other sub-sectors during the sixties result in a much more rapidly rising trend of total agricultural product.

The foregoing analysis provides us with no more than a breakdown of trends in agricultural production during our period. What we want to know are the factors behind the different trends in the various agricultural sub-sectors so far examined. We shall now proceed to examine factors affecting agricultural output: we start with the three main crop sub-sectors and then move on to examine the Livestock and other sub-sectors.

(b) Cropped Area. - We begin this part of our analysis by examining details of the cropped area during the period under review (Table V). We have already seen that there has been little change in the total cultivated area in Jordan during our period (Table I). As can be seen from Table Va, showing the indices of the area of crops, the total cropped area seems to fluctuate from year to year around an unchanging level: starting at 100 during 1954-1956, the index of total cropped area stood at a level of 65 in 1964 and 104 in 1965. It fluctuated between a minimum level of 81 in 1966 and a maximum of 108 in 1956. However, what is of significance is the change in the composition of this total cropped area. When we look at trends in the cropped areas of the various sub-sectors we find some possible explanations for the trends in the output of those sub-sectors which we have previously examined. Thus, as can be readily seen from Figure 2, the 'Vegetables' and 'Fruits and Vines' sub-sectors show a

TABLE V: Area of Crops 1954-1966 ('000 dunums)*

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Total Grains & Legumes	4700	4500	5223	4569	4802	4085	3794	4247	4556	3315	4531	4420	3280
of which Wheat	2732	2697	3254	2804	3000	2599	2510	2732	2848	2057	2967	2789	2139
" " Barley	1045	1012	1095	946	1026	805	746	950	1050	757	915	860	645
Total Vegetables	375	278	324	432	373	472	427	579	610	572	691	690	464
of which Tomatoes	97	94	102	112	102	153	139	190	210	205	239	206	168
" " Eggplants	16	16	16	17	18	29	31	36	38	38	35	38	33
" " Watermelons	169	95	134	212	155	172	142	223	226	129	175	218	92
" " Cucumbers										71	94	87	68
Total Fruits & Vines	286	281	281	292	314	332	344	368	374	365	375	390	391
of which Almonds	11	11	10	11	12	15	17	20	22	24	26	30	31
" " Figs	77	80	71	74	80	81	81	80	81	75	80	76	72
" " Citrus	1	1	1	2	4	6	10	17	19	18	19	24	25
" " Vines	157	152	162	163	175	183	188	200	197	193	195	198	201
Total Olives	344	354	368	390	412	437	465	492	512	538	559	580	602
TOTAL CROPPED AREA	5704	5412	6196	5683	5901	5325	5029	5685	6052	4790	6156	6079	4736

* 1 dunum = 1000 square metres = 1/4 acre (approx.).

Source: Department of Statistics, Statistical Yearbook, various years.
Area of olives derived from an index of the area cropped with olives given in FAO Mediterranean Development Project, Jordan Country Report (Rome 1967), p. 50.

TABLE Va: Indices of Area of Crops and of Total Cropped Area (1954-1956 = 100)

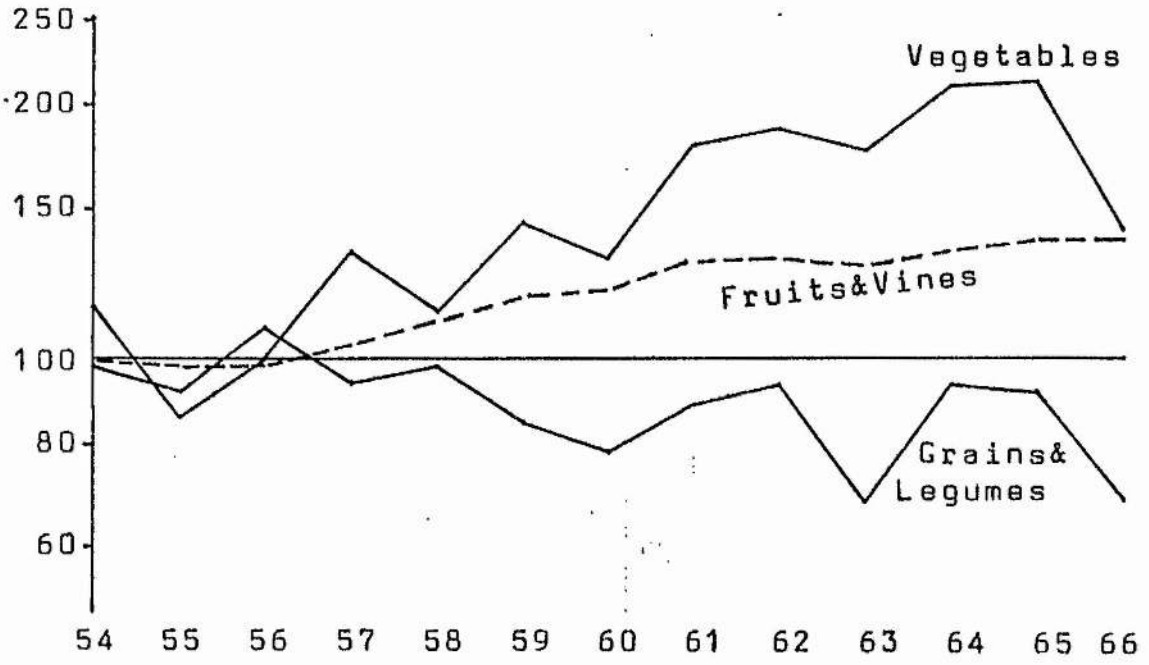
Year	Grains & Legumes	Vegetables	Fruits & Vines	All Crops
1954	98	115	103	99
1955	92	85	99	93
1956	109	100	99	108
1957	94	133	104	97
1958	98	114	111	100
1959	84	145	118	91
1960	78	131	120	86
1961	88	178	130	98
1962	94	187	132	104
1963	68	176	129	82
1964	94	209	133	105
1965	91	211	138	104
1966	68	142	139	81

Source: Adapted from data given in the Statistical Yearbook, various years.

sustained upward trend in their cropped areas during the whole of our period. In contrast the area cropped with grains and legumes shows a declining trend especially in the earlier part of our period during the fifties.

Accordingly, we can see that the sustained upward trends in the output of the 'Vegetables' and 'Fruits, Vines and Olives' sub-sectors are associated with rising trends in their cropped areas. The trend in the output of the 'Grains and Legumes' sub-sector (which shows a decline and a subsequent increase) is associated with a decline in the

Figure 2: Indexes of Cropped Areas, 1954-1966
(1954-1956=100)



Source: Table Va.

area cropped within this sub-sector which is especially pronounced in the earlier part of our period during which the output of this sub-sector undergoes a sharp decline. However, trends in the cropped areas provide in themselves only a partial explanation of the trends in the output and income generated within the relevant agricultural sub-sectors. While the volume of agricultural production can be influenced by changes in the cultivated area, changes in yields can also have considerable effects in this respect. This is not forgetting the important factor of possible changes in prices as our data of the value of agricultural output are based on current prices. This latter factor of price movements has had however only minimal effects in virtue of the general price stability prevailing during our period, and especially as far as the agricultural sector was concerned since agricultural imports could (and, in fact, as we shall see, did) readily flow in to meet any shortages and thus helped keep any price movements within narrow limits. Thus, bearing in mind the trends in the cropped areas which we have just examined, we now proceed to examine agricultural yields during our period. In fact in considering changes in yields and the factors affecting these changes we simultaneously obtain a fuller picture of trends in the cropped area and factors behind these trends themselves.

(c) Production and Yields. - Details of the production of various crops during 1954-1966 are contained in Table VI. When we combine these data with those given in Table V concerning the areas cropped, we obtain a measure of average yields per dunum. Table VIa

gives the indices of the resultant yields of the major crops together with the index of average rainfall during this period. Now when we examine separately the yields of each of the major crops we find that a marked difference exists between the yields of the major grain crops (wheat and barley) on the one hand and the yields of the major crops of vegetables and fruits on the other. While the yields of wheat and barley exhibit a decline in the initial part of our period followed by a rise from 1960 onwards, the other crops of fruits and vegetables show in contrast rising trends in their yields over the whole of our period (see Figure 3). In fact changes in the yields of wheat and barley are closely related to changes in rainfall as can be seen from Figures 3(a) and 3(b). This close relation is indicated by the fact that the correlation coefficient between wheat yield and rainfall comes to 0.92 during 1954-1966. This is only to be expected as the cultivation of wheat and barley is almost entirely carried out in the rain-fed zones where rainfall can fluctuate sharply from one year to another, and where droughts repeatedly occur and result in drastic reductions in the production of these crops. When, for example, the rainfall index fell from a level of 116 in 1954 to 66 in 1955, the output of wheat fell drastically from 233,000 tons in 1954 to 79,000 tons in 1955 and the output of barley was reduced from 104,000 tons to only 25,000 tons (see Table VI). In fact the period between 1954 and 1960 witnessed an especially adverse rainfall cycle in contrast to the latter period during the sixties when rainfall became much more plentiful. And, as we have already seen, the earlier

TABLE VI: Production of Crops 1954-1966 ('000 tons)

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Total Grains & Legumes	409	130	408	338	102	154	69	228	182	117	449	438	150
of which Wheat	233	79	243	220	66	104	44	138	112	76	295	278	101
" " Barley	104	25	96	81	17	26	13	62	36	23	97	95	23
Total Vegetables	242	148	178	240	237	351	399	533	495	538	612	583	383
of which Tomatoes ..	52	48	52	65	74	126	156	214	169	215	228	189	145
" " Eggplants ..	13	11	12	13	22	34	52	52	53	48	42	48	50
" " Watermelons ..	(126	48	68	109	77	105	91	163	166)	120	160	160	48
" " Cucumbers ..										45	64	61	40
Total Fruits & Vines	81	61	69	82	84	101	103	147	158	144	163	181	174
of which Almonds ..	2	1	1	2	1	2	2	2	3	3	3	4	4
" " Figs	18	8	13	15	14	15	18	21	21	19	21	19	16
" " Bananas ..	4	14	8	8	13	14	7	14	17	10	8	15	17
" " Citrus	1	1	2	2	3	6	7	16	21	39	37	47	57
" " Vines	52	32	37	47	43	54	43	78	79	59	77	79	62
Total Olives	61	12	72	15	52	11	17	114	7	39	97	37	33

Source: Department of Statistics, Statistical Yearbooks, various years.

193 351 727 675 465 617 579 1022 942 938 1321 1239 740

TABLE VIa: Indices of Yields of Major Crops and Index of Average Rainfall (1954-1956 = 100)

Year	Wheat	Barley	Tomatoes	Cucumbers*	Olives	Vines	Citrus	Bananas	Average Rainfall
1954	135	141	103	127	132	130	84	81	116
1955	47	35	98	86	25	81	90	118	66
1956	118	124	99	96	143	89	125	101	118
1957	124	120	113	88	21	112	94	56	112
1958	35	23	140	85	94	95	84	91	85
1959	63	46	159	104	19	116	105	94	79
1960	28	25	216	109	26	91	76	68	49
1961	80	92	215	124	171	154	107	112	93
1962	62	48	155	125	11	157	125	132	94
1963	59	43	201	133	53	119	234	94	60
1964	157	150	183	135	128	155	213	102	128
1965	168	140	177	122	48	157	214	104	132
1966	56	50	166	94	40	121	247	111	81

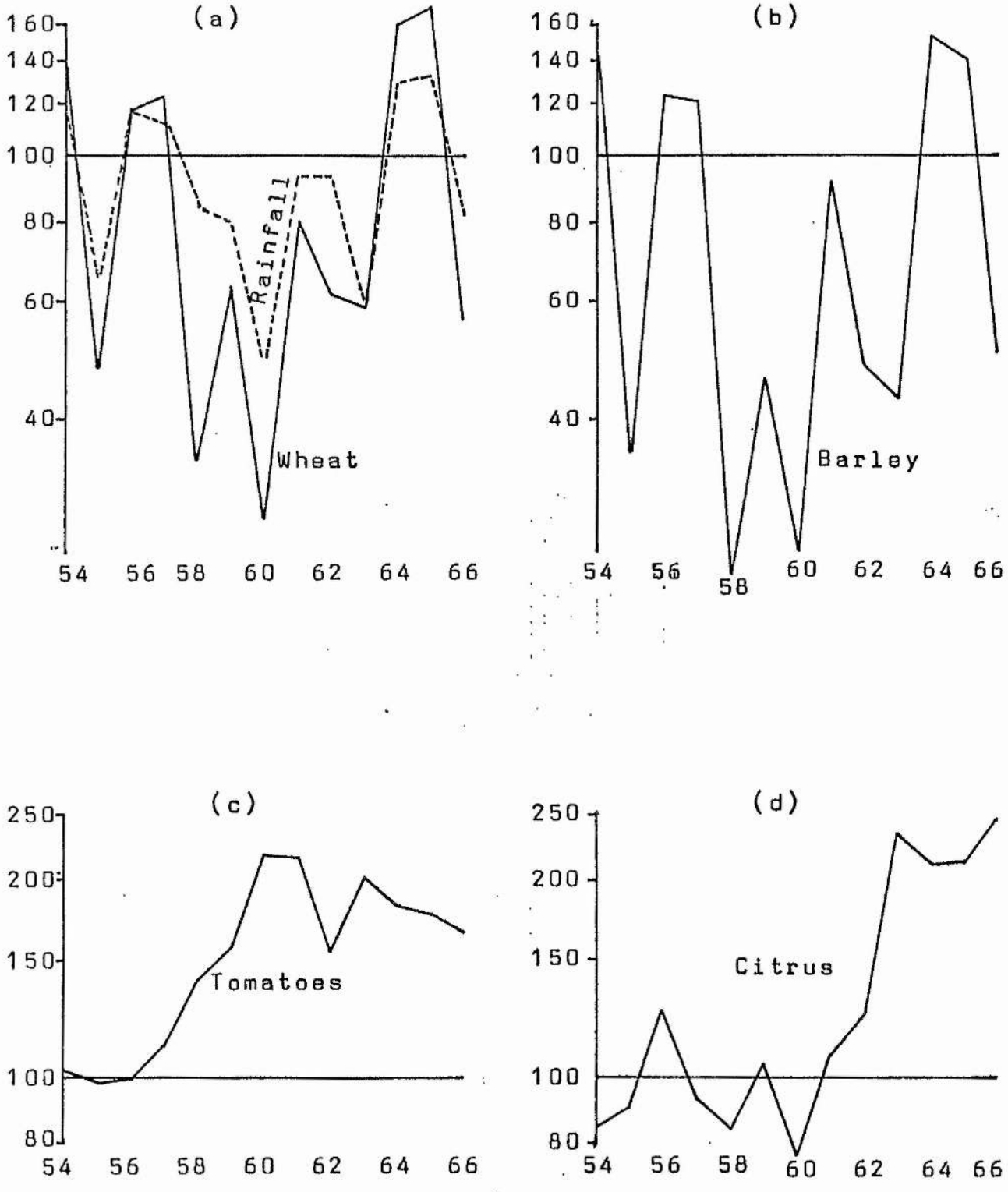
Source: FAO, Mediterranean Development Project, Jordan Country Report (Rome 1967), p. 52. Two values are given for the average Rainfall Index for the years 1960-1963 in the FAO Report; here the average of the two values is taken.
(FAO data itself is based on the estimates given in the Statistical Yearbooks.)

* including watermelons.

period between 1954 and 1960 witnessed a declining level of income in the 'Grains and Legumes' sub-sector as a whole (Fig. 1(a)), which was however followed by a period of expansion from 1960 onwards. It can be easily seen that this trend coincides very closely with the trend in the rainfall index which we have just examined.

At this juncture it becomes quite clear that the declining yields in the 'Grains and Legumes' sub-sector during 1954-1960 result from an adverse rainfall cycle. To be sure this adverse rainfall cycle not only reduces the yields of the rain-fed crops but also it reduces the areas cultivated with such crops. Farmers in the rain-fed zones normally wait for the early rains in the season before they dare "invest" their seed. The failure of such rains results accordingly in a reduction in the cultivated area in these dry farming zones during that season. As we saw in Table V and Figure 2, such a reduction in the area under grains and legumes did in fact occur during the period 1954-1960. The improvement in the rainfall level that subsequently followed did result in an expansion of the area under such crops (see Fig. 2). In the sixties the only periods of low rainfall (1963 and 1966) did however result in a reduction in this area which in any case was never again expanded to the same point as had been reached in 1956 when, with the help of the tractor, many farmers extended this type of cultivation into sub-marginal lands, a practice which soon proved to be very costly and ruinous. It is of interest that a similar trend occurred in the rain-fed zones in

Figure 3: Indexes of Yields of Major Crops and Index of Average Rainfall, 1954-1966 (1954-56=100)



Source: Table VIa.

near-by Syria.[1]

In analysing trends in yields we have been so far focusing our attention on the 'Grains and Legumes' sub-sector. We have seen that not only trends in yields within this sub-sector but also trends in its cropped area are closely related to climatic conditions: an adverse rainfall cycle during 1954-1960 resulted in the declining trend in both the dunumage and production of these crops which was subsequently followed by a more favourable rainfall cycle during the sixties when production and, to a lesser extent, dunumage increased. However when we next turn to examine trends in yields in the other sub-sectors we find, as already stated, that they differ markedly from those in the 'Grains and Legumes' sub-sector. In fact trends within these sub-sectors of 'Vegetables' and 'Fruits' symbolize and reflect the development that occurred within the agricultural sector in Jordan during our period, for the ultimate aim of agricultural development in Jordan, and indeed in the whole of the Middle East, is to reduce the near-complete dependence of agriculture on the uncertainties of rainfall. This has been achieved through the development of irrigation and intensive farming in the vegetables and fruits sub-sectors, where as a result both yields and cropped areas show a sustained upward trend throughout our period and in spite of the initial adverse rainfall cycle. The larger part of the expansion in the irrigated area occurred in the Jordan Valley (see Table II) and especially in the latter part of our period when Jordan's main irrigation scheme (the East Ghor Canal) was completed. Although the

1. Cf. Doreen Warriner, Land Reform and Development in the Middle East (London 1962), pp. 70-77.

larger part of the total cultivated area in Jordan remains under rain-fed grains and legumes, the area under vegetables and fruits has gained in relative importance (Table VII), and this together with the increased use of irrigation and other aids to agricultural production (e.g. fertilizers and insecticides) has increased the contribution of the vegetables and fruits sub-sectors beyond that of the traditional grains and legumes sub-sectors (see Table IV).

TABLE VII: Changes in the Crop Pattern (% of total area)

Crop	1956	1961	1964	1965
Field Crops*	84.7	74.9	74.0	72.9
Vegetables	5.1	10.1	11.0	11.3
Fruit trees and Vines	4.4	6.4	6.0	6.4
Olive trees	5.8	8.6	9.0	9.4
All Crops	100.0	100.0	100.0	100.0

* grains and legumes.

Source: FAO, op. cit., p. 50.

Thus, to sum up our findings so far in respect of trends in agricultural production, we have seen that agricultural output was expanding very slowly during 1954-1960 in contrast to its rapid expansion in the following period. This has been the result of repeated droughts in the earlier period when the output of the rain-fed 'Grains and Legumes' sub-sector fell drastically and thus cancelled most of the increase resulting from the development of the other two sub-sectors, 'Vegetables' and 'Fruits, Vines and Olives'. In this period between

1954 and 1960 total agricultural output accordingly registers a low average annual rate of growth to the order of 1.8 per cent as we have already stated. However from 1960 onwards the continuation of developments in the irrigated sectors is combined with a more favourable rainfall cycle (which reverses the previously declining trend in the 'Grains and Legumes' sub-sector), thus accelerating the rate of growth of total agricultural output to an average of 8.5 per cent per annum.

(d) Trends in Other Sub-sectors. - To complete our examination of trends in agricultural production we need to consider the remaining important agricultural sub-sector, viz., "Sales of Animals and Animal Products." Value of production in this sub-sector increased from JD 3.4 million in 1954 to JD 10.2 million in 1966 (Table VIII) and relevant details reveal that there has been a rapid increase in the number of livestock and in the number of livestock slaughtered during 1954-1966 (Table VIII).

Droughts and epidemic diseases are the main checking factors on the supply of livestock and especially sheep and goats which represent the larger part of the livestock population of Jordan. More favourable weather in the latter part of our period results in a rapid expansion of the numbers of sheep and goats so that by 1966 they reach the 1.9 million mark. However imports of animals and meats supplement local production to meet the demand for such products especially when domestic supply is reduced through drought. Imports of animals and meat

increased from about JD 0.6 million in 1954 to JD 2.2 million in 1962 and then declined to JD 1.2 million by 1966 as a result of increased local supply resulting from the more favourably weather in the sixties.

TABLE VIII: Number* of Livestock and Livestock Slaughtered‡ 1954-1966
(000)

Year	Sheep		Goats		Cattle		Camels	
	No.	Slaughtered	No.	Slaughtered	No.	Slaughtered	No.	Slaughtered
1954	364	138	545	122	52	10	19	4
1955	..	173	..	126	..	14	..	3
1956	494	165	666	151	67	13	26	4
1957	453	172	541	125	64	17	13	4
1958	689	197	584	156	116	29	20	6
1959	621	181	454	197	100	32	23	8
1960	609	233	513	215	62	22	20	11
1961	528	232	451	190	45	14	19	6
1962	702	253	537	205	60	13	12	5
1963	741	281	565	194	61	21	13	5
1964	803	254	650	222	65	18	19	5
1965	987	263	755	267	73	19	19	4
1966	1136	324	769	319	78	34	17	7

* figures for 1954-1957 are based on estimates of the Ministry of Finance; figures for subsequent years are based on estimates of the Department of Veterinary Services.

‡ refers to livestock slaughtered in municipal and refugee camps' abattoirs.

Source: Statistical Yearbook, relevant years.

The fish industry in Jordan has not been developed to supplement livestock although potentialities exist in the Gulf of Aqaba. Fishing is carried out on a small scale in the Gulf of Aqaba by independent fishermen, and it also occurs to a lesser extent in the Jordan and Yarmouk Rivers. The landed catch of fish increased from 42 tons in 1956 to 187 tons in 1965 while imports increased from 821 tons to 1887 tons during the same period (Table IX).

TABLE IX: Landed Catch and Imports of Fish 1956-1966 (tons)

Year	Gulf of Aqaba	Inland Fisheries	Imports*
1956	39	3	821
1957	86	4	1365
1958	48	3	1274
1959	50	2	1733
1960	121	4	1464
1961	133	4	1502
1962	188	7	1450
1963	161	8	1761
1964	174	5	1641
1965	181	6	1887

* includes fresh, canned, dried, smoked and frozen fish.

Source: FAO, op. cit., p. 72.

The poultry industry on the other hand has started to expand rapidly in response to increased demand for its products. Imports of poultry and eggs increased from JD 17,000 in 1958 to JD 490,000 in 1965 and it is estimated in the FAO report that in 1966 a total of

695 commercial poultry farms raised 156,000 layers and produced five million broilers.[1] In fact sheep and goats' meat together with grains (mainly wheat and barley) plus a variety of vegetables and fruits constitute the main components of people's diet in Jordan, and accordingly fish, poultry and dairy products represent relatively minor components of total agricultural production as can be seen from data already given in Table IVa relating to 1966.

A further point of interest concerning the agricultural sector in Jordan is its inability so far to participate in the provision of raw materials for processing in industry. Apart from minor production of such items as tobacco and some forest products (which do not show any increase during our period - see Table IV), imports are the only source of such materials. In fact as we shall see in the next chapter, dealing with manufacturing, the Jordan economy depends heavily on imported inputs for lack of domestic supplies. Even within the newly developed sub-sectors of the food industry (e.g. vegetable oil refining) heavy reliance was placed on imported raw materials. Plans have been discussed for introducing such crops as sugar and cotton into the Jordan Valley, but no positive steps have been taken in this direction.

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1. FAO, op. cit., p. 75.

(3) Factors Affecting Agricultural Development

(a) The Supply of Food. -- So far we have been examining land use and trends in agricultural production in Jordan during our period. We now proceed to examine important factors (such as land tenure, labour force, institutions) in the development of the agricultural sector during this period.

As we have already seen in the introductory chapter of the thesis, the situation existing at the outset of our period had been reached after nearly a century and a half of gradual "revival" during which agricultural activity was "re-introduced" to the greater part of the cultivable area in Jordan. The expansion of dry-farming had pushed the margin of cultivation right to the edge of the desert and Jordan developed into a net-exporter of agricultural products, forming in fact the hinterland of the relatively more advanced region to the west (i.e. Palestine) with which it had special links under the Mandate.[1]

This framework was however suddenly and fundamentally disrupted. Population trebled overnight through the incorporation of the west bank and the influx of the refugees, as we have already seen in Chapter II. However the cultivable area was increased by only about 50 per cent through the addition of the agricultural area of the west

1. Reference has already been made to data relating to Jordan's imports and exports of food prior to 1948 derived from A. Konikoff, Transjordan: an Economic Survey (Jerusalem 1946).

bank (see Table III). Although the new agricultural area was relatively more fertile than the lands of the east bank, it was much more densely populated and comprised "the most barren and least self-sufficient part of Palestine".[1] Accordingly domestic agriculture could not possibly meet the sudden and large increase in the demand for food and the position of Jordan was reversed from surplus to deficit in this respect. A chronic and substantial food-gap emerged which has ever since characterized the Jordan economy. Food imports into Jordan increased to the extent of surpassing total domestic exports (of food and other goods) throughout our period. In fact total food imports have been to the order of 260 per cent of total domestic exports during 1954-1966 (Table X), and the deficit had to be met through Jordan's earnings on invisibles and through foreign assistance as we shall see in the part dealing with foreign trade and the balance of payments.

The point to be stressed at this juncture is that while the demand for food was suddenly and substantially increased and while this put pressure on available food supplies, the inability of domestic agriculture to meet this increased demand was readily compensated for by the inflow of food imports thanks to foreign assistance. Thus the high level of demand for food was continuously met through imports accordingly resulting in the "exposure" of the domestic agricultural sector to a high level of demand for a prolonged period.

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1. R.S. Porter, Economic Survey of Jordan (British Middle East Office, 1953), p. 14.

TABLE X: Food Imports and Total Domestic Exports 1954-1966 (JD mill.)

Year	Total Food Imports	Total Domestic Exports
1954	7.0	2.4
1955	8.4	2.6
1956	7.9	4.4
1957	10.1	4.3
1958	11.6	3.1
1959	12.4	3.1
1960	14.4	3.5
1961	14.3	4.3
1962	13.1	4.9
1963	14.8	5.5
1964	13.1	7.0
1965	14.4	7.8
1966	19.3	8.8

Source: Statistical Yearbook, relevant years, and Department of Statistics, Foreign Trade in the Jordan Economy 1950-1966 (Amman 1967: Arabic).

However, other than this large and chronic food gap, a new and rapidly rising one started to emerge from the mid-fifties onwards as a result of the swift increase in population and the growth of per capita income through the rapid expansion of secondary and tertiary activities. While population was increasing, as we saw in Chapter II, at an average annual rate of 2.8 per cent, total GDP was increasing at the high average rate of 10 per cent per annum. The data on the composition of private consumption expenditure in Chapter III (Part One) relating to 1959-1966 yield an income elasticity of demand for

food of (0.4). While this seems to be rather on the low side, and bearing in mind that its value may have been higher initially when per capita income was rising from very low levels, its combination with the data on the growth of population and GDP would yield an annual rate of increase in the demand for food of about 6 per cent.[1]

Perhaps one of the most basic of the "vicious circles" facing poor countries in their attempts to develop is the inelasticity of food supply in the short run. While in a developing country any increase in the level of per capita income tends to be largely (and immediately) translated into an increased demand for food, the supply of food tends to be inelastic in the short run especially in a setting such as Jordan was in at the outset of our period when there was little scope left for the expansion of total agricultural output through simply extending the margin of cultivation. The line along which agricultural development could proceed was predetermined by the developments that occurred earlier on. Dry-farming was already pushed to the limits of cultivation. Increases in total output had to come through increases in productivity which could be theoretically achieved mainly in those sectors where reliance on rainfall could be reduced, viz., vegetables and fruits. The limited potential for irrigation, due to limited water resources, excluded the possibility

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1. The annual rate of increase in demand for food is given by $D = p + ng$, where p and g are the rates of increase of population and per capita income and n is the income elasticity of demand for food.

of developing irrigation on an extensive scale. However what is of importance is that the expansion of agricultural output had to await the development of irrigation and intensive farming which normally requires relatively long periods of time.

We have already mentioned, in Chapter III, that the growth of production in the secondary and tertiary sectors of the Jordan economy proceeded initially in spite of the inability of agriculture to meet the rapidly rising demand for food. It was through the ability of food imports (financed through foreign aid) to fill the gap, while developments in the agricultural sector (such as irrigation schemes in the Jordan Valley) were being undertaken, that agricultural developments, and indeed the development of the whole economy, were allowed to proceed in spite of the food gap. Indeed while food imports were able to satisfy any excess demand, the pressure on the agricultural sector to increase its output was maintained, and no corrective measures were undertaken (such as import controls, rationing, price controls) which may normally result in the removal of the initial stimulus for expansion through checking the overall growth of the economy. Moreover, although a large part of the increased demand for food was met through imports there did not result a disincentive on the expansion of domestic agriculture. On the one hand the food shortage was very acute, and on the other hand there is a limit beyond which imports cannot replace domestic production: such items as fresh vegetables and fruits are very costly to import and reach the market at a price that puts a premium upon the expansion

of domestic output rather than discourage it. Even in those sectors (such as grains) where disincentive could have occurred prices were prevented from falling beyond a minimum level through government policy which aimed successfully at protecting domestic agriculture from "dumping" or from large-scale imports.[1]

The inability of domestic agriculture to meet the increasing demand for food was especially evident in the earlier period and up to 1960. As we have seen in analysing trends in agricultural production, the period between 1954 and 1960 was characterized by successive droughts which drastically reduced total agricultural output. During this relatively short period imports of foodstuffs doubled (Table XI) to fill the gap. In contrast during the sixties when the completion of many of the agricultural developments was coupled with a favourable rainfall cycle domestic agriculture expands its output adequately to meet the rapidly increasing demand for food. From 1960 onwards food imports show no tendency to increase (except for 1966 as a result of a bad harvest) and in fact agriculture contributes positively to the development of the economy through increasing its exports which were more than doubled during 1960-1966 (Table XI).

Although in the latter period the chronic food gap (which has its origins in the events of 1948) still persists, it is prevented from expanding. Foreign assistance still plays in this respect the

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1. Cf. IBRD, The Economic Development of Jordan (Baltimore 1961), p. 122.

TABLE XI: Imports, Exports and Net Imports of Foodstuffs (JD million) (1956-1966)

Year	Imports	Exports	Net Imports*
1954	7.0	2.1	4.9
1955	8.4	1.6	6.8
1956	7.9	3.6	4.3
1957	6.1	3.3	6.8
1958	11.6	2.0	9.6
1959	12.4	1.8	10.6
1960	14.4	1.9	12.5
1962	13.1	3.1	10.0
1963	14.8	3.4	11.4
1964	13.1	3.5	9.6
1965	14.4	4.2	10.2
1966	19.3	4.5	14.8

* imports less exports.

Source: Statistical Yearbook, relevant years; Foreign Trade in the Jordan Economy 1950-1966 (op. cit.).

important rôle of providing the necessary foreign exchange to finance the chronic food gap, plus the sudden increase in imports that may occur as a result of drought as happened in 1966. The imports and exports of foodstuffs will be analysed in more detail (together of course with other imports and exports) in that part of our study dealing with foreign trade and the balance of payments, where the reflection of agricultural trends in the foreign trade sphere will also be examined. What is of importance for our purposes here is to bear in mind that the development of agriculture was greatly assisted by

the ability of imports to compensate for any inadequate performance in the agricultural sector thus permitting the overall development of the economy (and indeed the development of the agricultural sector) to proceed unthwarted by the inelasticity of food supply in the short run or by any adverse climatic condition.

Before proceeding to examine the other factors in the development of agriculture mention ought to be made of the fact that although the events of 1948 increased substantially the pressure of the population on agricultural land in Jordan, in many instances the new population (i.e. the refugees) brought with them skills that were subsequently utilized in the expansion of the agricultural sector. Especially in such areas as the Jordan Valley, the refugees utilized their more advanced skills (which were acquired in the relatively more advanced agriculture of Palestine) in the development of vegetables and fruits farming. In fact, as we shall presently see, one of the contributions of the agricultural sector in the economic development of Jordan has been its ability to absorb an additional and new labour force. Although a "release" of labour occurred in the traditional sectors, an absorption of labour (though of a different, more skilled, type) occurred in the new irrigated sub-sectors. However before going into this aspect of the development of agriculture we now turn to examine the all-important question of land tenure.

(b) Land Tenure. - Prior to the Mandate land tenure was in a chaotic state not only in Jordan but all over the neighbouring

territories of the Fertile Crescent. Land law was based on the Ottoman Land Code of 1858 and the chaos stemmed from the non-application of the law rather than from any basic fault in the Code itself. This Code recognized five categories of land: mulk land (land over which the individual has the right of absolute ownership and the right to the usufruct); miri land (land over which the state holds the right of absolute ownership with the individual having the usufruct); waqf land (land dedicated for a beneficent purpose); matruka land (serving a public purpose, e.g. roads); and mawat land ("dead" land on the fringe of the desert).[1] This attempt to codify previous legislation failed as the law was applied only to a very minor extent. Insecurity of tenure predominated (except in urban property) and most of the land was cultivated under the musha'a system (where land was held in a communal or tribal form without any particular plot belonging to the individual) which the Ottoman Code had expressly forbidden.

The importance of setting land ownership on a firm footing was recognized by the Mandate Government from an early date. The Department of Lands and Surveys was established in Jordan in 1929 and a Land Settlement Law was enacted shortly afterwards which provided, amongst other things, for the setting up of the Land Settlement Court

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1. See Doreen Warriner, op. cit., "A Note on State Land and the Legal Categories of Land," pp. 65-70; and, by the same author, "Land Tenure in the Fertile Crescent," a report presented to the Middle East Supply Centre (1944) and reprinted in Charles Issawi, The Economic History of the Middle East 1800-1914 (Chicago 1966), pp. 72-78.

to deal speedily with the settlement of titles.[1] In fact, the greatest progress in land registration among the countries of the Fertile Crescent was made in Jordan where by 1950 two thirds of the total area was registered in contrast to about a half in Iraq in 1950 and slightly over 40 per cent in Syria by 1951.[2] Miri land previously held under the communal (musha'a) system, which discouraged land improvement through periodic reallotment, was converted into miri mafruz (i.e. "sorted" or parcelled-out land). And in fact although it may be legally arguable that the state holds the right of absolute ownership over miri land, miri mafruz has for all practical purposes become private land with the term "owner" rather than "right-holder" being officially used.

An important point to be stressed at this juncture is that land distribution in Jordan emerged with a fundamentally different structure from that prevalent in the adjoining countries where the distribution of property in land was characterized by wide inequality. In Egypt prior to the agrarian reforms enacted after the revolution of 1952, 45 per cent of the cultivated area was owned by 1.2 per cent of the owners;[3] In Jordan figures reveal that a comparable percentage of the cultivated area was covered by over 12 per cent of the total

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1. See G.F. Walpole, "Land Problems in Transjordan," Journal of the Royal Central Asian Society, Volume 35 (1) (January 1948), pp. 52-65.

2. See Gabriel Baer, "Land Tenure in the Hashemite Kingdom of Jordan," Land Economics, Vol. XXXIII, No. 3 (1957), pp. 187-197.

3. Doreen Warriner, op. cit., p. 24. Data refer to 1952.

number of holdings. The contrast is sharper still when we look at the position in Iraq and Syria where properties of 200,000 acres and over characterized their land systems in the fifties. In Iraq, for example, data relating to six provinces show that in 1950 there were thirteen properties between 125,000 and 250,000 dunums and twenty-one properties between 250,000 and 500,000 dunums.[1] In Jordan in 1950 properties over 5,000 dunums numbered only seventeen and covered about 3 per cent of the total registered area. And more recently, in 1965, there were only two holdings in excess of 10,000 dunums. In Jordan small and medium-sized owner-occupiers predominate, with large land-holdings covering only a relatively small percentage of the total cultivated area.

Not only was there from the outset of our period an absence of wide inequalities in the distribution of agricultural land in Jordan but, as we shall see presently, there was also an absence of another aspect of agricultural organization usually associated with Middle Eastern countries (especially earlier on before attempts at land reform were made), viz., the leasing of large properties of the large landowners in small units to landless peasants with all the landlord-peasant involvements of rent extortion and damage to the land resulting from "mining" rather than cultivating and tending the land. From Table XII it can be seen that in 1953 about 25 per cent of the total farm area was held in the small-size groups of between 10 and 100 dunums and another 55 per cent in the medium-size groups

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1. Ibid., p. 141.

TABLE XII: Distribution of Holdings by Size Group, 1953 and 1965

Size Group (dunums)	1953				1965*	
	Holdings		Area		Holdings	
	Number	%	'000 dunums	%	Number	%
less than 10	26,708	22.49	1,472		33,986	36.35
10 and under 50	43,899	36.96	1,145	10.9	32,573	34.84
50 " " 100	21,332	17.96	2,108	14.0	14,221	15.21
100 " " 200	15,456	13.01	2,591	20.1	8,003	8.56
200 " " 500	9,028	7.60	1,108	24.7	3,745	4.01
500 " " 1,000	1,687	1.42	555	10.5	688	0.74
1,000 " " 2,000	421	0.35	507	5.3	198	0.21
2,000 " " 5,000	178	0.15	283	4.8	60	0.06
5,000 " " 10,000	45	0.04		2.7	16	0.02
10,000 or more	22	0.02	741#	7.0	2	-
Total	118,776	100.00	10,510	100.0	93,492	100.00

* data on area by size-groups was found unreliable by the Census Report (p. 17) and we therefore do not use it here.

\# includes 493,148 dunums masha'a in Jerusalem and Nablus Districts.

Source: Department of Statistics, 1953 Census of Agriculture (Amman, n.d.): Report on Agriculture Census 1965 (Amman 1967).

of between 100 and 1,000 dunums. Of the remaining 20 per cent, only 7 per cent was held in the group of 10,000 dunums or more. And when we look at the data relating to tenure by type we find that 76 per cent of the total area of these holdings in 1953 was owned, and another 21 per cent was partly owned and partly rented. The pressure of the population on the land has however by 1965 reduced the percentage

of holdings which were owned to 65 per cent (which nevertheless remains high) with the ratio of holdings partly owned and partly rented remaining at roughly the same level as that of 1953 (Table XIII). The ratio of rented holdings had as a result risen to 15 per cent of the total farm area, the rise reflecting the pressure of the population on the land and the extent of agricultural development whereby self-sufficient forms of owner-occupier cultivation give way to market-oriented farming as occurred in the Jordan Valley which, as we shall see later, has had the highest ratio of rented or partly rented holdings.

TABLE XIII: Percentage Distribution of Holdings by Type of Tenure, 1953 and 1965

Year	Owned	Rented			Mixed*	Total
	Total	Sharecropped	Other	Total	Total	
1953	76.3			2.7	21.0	100.0
1965	65.2	11.1	3.9	15.0	19.8	100.0

Source: 1953 Census of Agriculture; Report on Agriculture Census 1965.

* holdings partly owned and partly rented.

Furthermore, as Gabriel Baer has pointed out,[1] when we distinguish between holdings (i.e. farms or units of operation to which the

1. Gabriel Baer, op. cit., pp. 190-194, where data relating to Arab land tenure in Israel is utilized to provide supporting evidence.

Censuses data in Jordan refer) and properties (i.e. ownership of land as such), the available evidence indicates that in Jordan leasing occurs mainly between small owners and medium-sized tenants rather than between large owners and small tenants as occurred elsewhere in the Middle East. The following table indicates that the ratio of owned holdings is the highest within the large and small size groups, with the medium size groups having a lower ratio of owned holdings. Now although these figures do not indicate the size group from which the land was leased, the analysis of land ownerships and their comparison with land holdings in Jordan reveals that "small holdings cover a smaller area than do small properties while large holdings extend over a slightly greater area than large properties."[1] Thus, keeping in mind that large and small holdings contain comparable ratios of owned land, this data indicates that most of the leasing is done by the small landowners.

Sharecropping (i.e. sharing of the crop between the tenant and the landowner) is the predominant form of rental. The tenant's share is a fixed one but varies in accordance with the type of the land (rain-fed or irrigated), being higher on the rain-fed land (about 50 per cent). Furthermore, the tenant's share varies in accordance with the provision of seed, the landlord's share thus becoming higher in cases where he supplies part of the seed.

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1. Ibid., p. 192.

TABLE XIV: Percentage Distribution of Holdings by Type of Tenure and by Size Group, 1953

Size Group (dunums)		Owned %	Rented %	Mixed %
10 and under	50	83.1	6.2	10.7
50 " "	100	76.6	3.8	19.6
100 " "	200	72.8	2.2	25.0
200 " "	500	70.3	1.8	27.9
500 " "	1,000	69.1	2.3	28.6
1,000 " "	2,000	73.5	3.3	23.2
2,000 " "	5,000	82.5	3.4	14.1
5,000 " "	10,000	89.7	0.0	10.3
10,000 or more		100.0	0.0	00.0

Source: 1953 Census of Agriculture.

Several factors can be put forward as accounting for the differences between the land systems of Jordan and those of the neighbouring countries (Egypt, Syria, Iraq). A most important factor is that in the neighbouring countries of Syria and Iraq powerful tribal chiefs managed to register as their private property vast areas of land previously held by members of their tribe under various forms of communal tenure. Thus the efforts of their respective governments to organize their chaotic land systems resulted to a large extent in powerful personalities obtaining title to large areas which in practice they re-leased to small peasants. Moreover, those small landowners who managed to obtain titles to their holdings resorted to borrowing from money-lenders in years of drought which occur repeatedly, and

eventually many such money-lenders (e.g. in Homs and Hama area in Syria) acquired ownership of large areas through the inability of peasants to repay the debts which were acquired at usurious rates. While both of these factors (registration of lands in names of tribal chiefs and the acquisition of land by money-lenders) were very powerful in many parts of Syria and Iraq, in Jordan they had a much smaller impact. On the one hand tribal chiefs were not as powerful in Jordan vis-à-vis the central government as they were in Syria and Iraq where lands were in any case of a superior quality through more plentiful rain; on the other hand the dependence of peasants in Jordan on money-lenders especially in the hilly regions in the north (Ajlun) was much less marked than elsewhere and their contacts with urban centres were very limited resembling in this respect the hilly regions in Syria, Iraq and Lebanon. This semi-seclusion plus the unsuitability of hilly regions for large-scale farming kept the small owner-occupiers secure in their lands. In fact in the rain-fed regions in Jordan that came either in contact with urban centres (e.g. around Amman) or where powerful tribal chiefs were settled, we find relatively large properties but nothing approaching those of Syria and Iraq, where in any case the density of the population on the land was much lighter than in Jordan.

A further factor which should be borne in mind in considering the distribution of ownership is the absence in Jordan of plantation types of farming (cotton, sugar) such as exist in Egypt, where from an early date land ownership passed into the hands of a few powerful

families. Moreover, the great expansion of the cultivated area such as that undertaken by "merchant-tractorists" - to use Doreen Warriner's term - in Syria (especially in the Gezira area) occurred on a much more limited scale in Jordan where the scale of the merchants' resources and the scale of the marginal lands were much more limited than in Syria. In fact, it is of interest, that the predominance of medium-sized holdings in Jordan resembles a similar predominance in the southern parts of Syria (Hauran and Jebal Druze) which adjoin the northern agricultural area in Jordan.[1] Thus while the settlement of titles to land in the inter-war period resulted in the emergence of numerous large properties in Iraq and Syria, in Jordan the ownership of land emerged predominantly in the hands of medium-sized owners, with a limited number of large properties at the higher end of the scale.

The more equal distribution of land amongst the population of Jordan in fact can be considered as supporting the normally assumed smaller inequality of wealth distribution in Jordan than in the neighbouring countries and the greater importance of the middle class. Clearly this has far-reaching implications for the political and economic development of the country and may have been a contributing factor to the relative stability (in comparison with the neighbouring countries) that the country has experienced during our period.

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1. Cf. Doreen Warriner, op. cit., p. 83.

(c) Labour Force. - At the outset of this part of our study we indicated the distribution of the agricultural area amongst the various districts. The geographic distribution of agricultural land by type of farming was also indicated (Table III). We saw that while in 1953 about 38 per cent of the total cultivated area was on the west bank, this ratio declined to about 28 per cent by 1965 mainly as a result of the expansion that occurred in those regions of the east bank where intensive farming was developed through the increasing use of irrigation. At the outset of our period the agriculture of the west bank was relatively more advanced than that of the east bank and thus the west bank did not provide the same scope for development as the relatively undeveloped east bank did, especially in such areas as the Jordan Valley which were uninhabited around the beginning of the period.

Now when we examine the distribution of the agricultural population and the agricultural labour force amongst the various districts of the country we can also see that, as one would expect, its pattern reflects the pattern of agricultural activity in the Kingdom (Table XV). We find that the highest percentage of the total agricultural population and of the total agricultural labour force was located in Nablus District in both 1953 and 1967, bearing in mind that this district contained not more than 22 per cent and 16 per cent of the total cultivated area in each of these years respectively. Although Irbid District contained a higher percentage of the total cultivated area

than Nablus District in both of those years (Table III), it had a lower percentage of total agricultural population and labour force. The reason behind this is that, especially at the outset, Nablus District contained by far the largest area of fruits, vines and olives (about 50 per cent), having thus a more intensive type of farming which can support and also requires relatively more labour than the extensive dry-farming type of cultivation that occurred in Irbid District. Mechanization (as we shall see later: Table XVII) enabled vast areas of marginal land to be dry-farmed without the need for the large numbers of agricultural workers that the cultivation of fruits and vegetables requires. In fact these two types of development (mechanization of dry-farming and intensive cultivation through irrigation) have exerted opposing pressures on the agricultural labour force: on the one hand there was a "release" of rural population through mechanization of dry-farming; on the other hand there was a "pull" or an absorption of agricultural labour through the development of irrigation and intensive farming. The type of cultivation that occurs in Nablus District and the Jordan Valley, for example, requires relatively more labour than the few machine operators who can cultivate vast tracts of land on the north-eastern regions of the east bank.

Thus while in the course of development a shift of population occurs from the agricultural to the secondary and tertiary sectors, a shift of population may occur as well between the various sub-sectors

TABLE XV: Percentage Distribution by Districts of Agricultural Population 1952 and 1967, and of Agricultural Labour Force, 1967

District	Agricultural Population *		Agricultural Labour Force 1967 #		
	1952	1967	Family Labour	Wage Earners	Total
Amman	8.1	6.9	7.8	3.8	6.5
Balqa	5.8	4.6	4.7	6.3	5.2
Irbid	20.8	23.8	24.1	20.2	22.9
Karak & Ma'an	9.1	8.4	8.1	8.9	8.4
Nablus	28.1	27.1	29.2	38.5	32.2
Jerusalem	17.5	18.2	15.9	12.7	14.8
Hebron	10.6	11.0	10.2	9.6	10.0
Total:	100.0	100.0	100.0	100.0	100.0

* percentages for 1952 refer to rural population as given in Chapter II. Percentages for 1967 refer to agricultural population in the strict sense, i.e. population of farmers and their families (wage-earners) working in agriculture.

\# refers to persons actually engaged in agricultural work. It therefore excludes members of farmers' families living but not working on the farm.

Source: Percentages for 1952 taken from data already presented in Chapter II; other data from Department of Statistics, Population and Labour Force in the Agriculture Sector 1967 (Amman 1968), Tables I and 4.

of the agricultural sector itself. And just as the development of the non-agricultural sectors may absorb the disguised unemployed in agriculture, so as well may the development of intensive farming (such as vegetables and fruits) provide opportunities for absorbing part of the pool of disguised unemployed agricultural labour. Although there is no relevant data covering the whole of our period, it has been

estimated by the Department of Statistics that between 1961 and 1967 the agricultural sector absorbed an additional 3 per cent of the total potential labour force in Jordan.[1] The study of "Population and Labour Force in the Agriculture Sector" revealed that in 1967 there were 244,000 persons employed in agriculture. The figure of employment in the agricultural sector revealed by the 1961 Census of Population was however found to be not strictly comparable with this figure as the Population Census excluded the larger part of female family labour from agricultural employment. However upon adjusting the 1961 figure to render it comparable with that of the 1967 figure, the total employment in agriculture in 1961 is estimated to have been about 170,000 persons which comes to about 21 per cent of the total potential labour force of that year (i.e. population between 15 and 64 years of age). The figure for the 1967 agricultural employment comes to 24 per cent of the total potential labour force of that year (which was 1,030,000 persons compared with 855,000 in 1961), and accordingly it is estimated that the agricultural sector has absorbed an additional 3 per cent of the rapidly increasing potential labour force in the years between 1961 and 1967.

In the same study of Agriculture in 1967 it was found that permanent workers in agriculture (i.e. persons whose main occupation was in agriculture) worked only 35 per cent of the total number of days in the season with which the study was undertaken (Table XVI).

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1. Department of Statistics, Population and Labour Force in the Agricultural Sector 1967 (Amman 1968), pp. 30-34 (Arabic part).

TABLE XVI: Permanent Workers in Agriculture by Percentage of Days Worked, 1967 *

District	Number of Permanent Workers	Total Number of Days Worked	Average Number of Days Worked per Worker	Percentage of Days Worked to Total Days
Amman	10,725	479,541	45	49
Jerusalem	24,231	521,180	22	24
Nablus	51,260	1,268,600	25	27
Irbid	37,868	1,744,597	46	50
Balqa	9,427	405,203	43	47
Hebron	14,666	298,531	20	22
Karak	14,314	501,300	35	38
Ma'an	2,494	68,832	28	31
Total:	164,495	5,287,784	32	35

* refers to the three first months of 1967 containing 91 days.

Source: Population and Labour Force in the Agriculture Sector 1967, Table 6.

In spite of the fact that the period covered contained the main season of work in the intensively cultivated areas we obtain a lower rate of days worked in Nablus and Jerusalem (with their large fruits and vegetables sub-sectors) than in such dry-farming districts as Karak and Ma'an. While this indicates difficulties involved in quantifying the concept of disguised unemployment, the aggregate figure for the whole of the Kingdom nevertheless serves to indicate the extent of underutilization of labour resources. In fact this factor may partly account for the relatively slow increase in productivity in the agricultural sector during our period. If we utilize

the adjusted figure of employment in the agricultural sector of 170,000 in 1961 then we obtain an average value added of JD119 per annum per worker when we combine it with that of the average value added in agriculture during 1960-1962. When we obtain a comparable figure for 1966 (using the figure of employment in 1967 and value added in 1965-1966) we find that average value added per worker in the agricultural sector increased to only JD126 by 1966. The slowly rising productivity in this sector contrasts sharply with the rapid increase of productivity in the manufacturing sector (as we shall see in the next chapter) and indicates the need for further development (via irrigation and intensive farming) as occurred in the Jordan Valley where rapid increases in productivity were achieved as will be seen when we examine the development of that area.

To return now to the figures of Table XV, when we compare the distribution of the agricultural population and labour force with those of the cultivated area (Table III) we can see that the ratio of agricultural land to agricultural population was much higher on the east than on the west bank in reflection of the relatively more intensive type of cultivation that predominates on the west bank. Moreover, the development of similarly intensive cultivation in certain districts of the east bank (e.g. Irbid district containing the northern Jordan Valley) has not changed the picture on the surface and in both 1952 and 1967 the west bank contains over one half of the total agricultural population. This is because districts such as Irbid on the east bank contain areas where both types of agricultural

development occurred (mechanization of dry-farming and irrigation) and where pressures on the demand for agricultural labour were being released in opposite directions. In spite of this factor, Irbid District shows the highest gain in percentages of agricultural population located in that area between 1952 and 1967. In fact all the other east bank districts show a decline for the scale of the mechanization of dry farming that occured in them far outweighed the scale of any irrigation and intensive farming development.

When we look at the absolute figures of the composition of the labour force in 1967 we find that there were 79,147 wage-earners in the total agricultural labour force of 244,000.[1] This gives a ratio of wage-earners to total labour force of about 32 per cent. No comparable figures are available for previous periods: however the Survey of the Jordan Valley in 1961 revealed that in that most advanced agricultural area in Jordan the ratio of wage-earners to total agricultural labour force was about 34 per cent.[2] The fact that the Kingdom as a whole had a comparable ratio of 32 per cent in 1967 may seem to indicate the changing structure of agricultural employment for in 1961 the ratio of wage-earners in the total agricultural labour force in the whole of Jordan must have been much lower than the level of 34 per cent in the Jordan Valley.

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1. Ibid., Table 4.
2. Department of Statistics, The East Jordan Valley: A Social and Economic Survey (Amman 1961), p. 83.

Agricultural development involves not only changes in the input of labour, but also in inputs of other co-operating factors. The mechanization of dry-farming has already been mentioned, and the following figures indicate the rate at which this has occurred, in addition to the increased use of fertilizers and other chemicals.

TABLE XVII: Sales of Fertilizers, Chemicals and Agricultural Machinery (1958-1966)

	1958	1959	1960	1961	1962	1963	1964	1965	1966
Sales of Inorganic Fertilizers (tons)									
Nitrogenous	1675	2188	1728	2188	2230	5519	5319	5237	6517
Phosphatic	339	716	337	316	414	694	585	754	1255
Other	693	378	282	364	444	1070	1358	1860	2460
Total	2707	3282	2347	2868	3088	7283	7262	7851	10232
Sales of Insecticides and Chemicals (tons)									
Sulphur								796	1373
Other								226	101
Total	n.a.	822	722	888	1010	1258	1195	1022	1474
Sales of Agricultural Machinery (no.)									
Harvesters	-	1	-	4	12	-	7	53	3
Ploughers, drillers, harrows and others	141	218	290	560	393	359	365	403	444
TOTAL	141	219	290	564	405	359	372	456	447
No. of Tractors:	664*	807*	883*	836	1081	1169	1462	1772	2068

* includes unserviceable tractors.

Source: FAO, op. cit., p.53. Data derived from Jordan Statistical Yearbook.

Agricultural machinery is mostly utilized in the dry-farming districts of the east bank. In contrast, fertilizers are mostly used on the west bank and especially in Nablus District, which contains, as we have already seen, around 50 per cent of the area of fruits, vines and olives. Details of sales of fertilizers by district in fact show that about one half of the total fertilizers shown in Table XVII were sold each year in Nablus District. The increasing use of fertilizers is indicated by the expansion of their sales from only 2700 tons in 1958 to over 10,000 tons in 1966. Likewise tractors show a very rapid rise in their numbers from 664 (including some out of use) in 1958 to 2068 in 1966. The rapid spread of the tractor is further indicated by the fact that in 1951 there were only 84 tractors in the whole of Jordan. The introduction of the tractor has in fact by and large transformed dry-farming and reduced tremendously the demand for labour in the relevant regions.

In spite of the rapid increase in the use of fertilizers, imports are the main source of supply. Other than the local supply of manure, no domestic sources of fertilizer supply exist although plans exist for the development of such an industry based on Jordan's deposits of phosphates and the possibilities of extracting potash from the Dead Sea. However the narrowness of the market, and the lack of cheap sources of energy, have so far prevented the implementation of such plans and Jordan's resources of phosphates continue to be exported in a raw form.

(d) Institutions: Agricultural Credit. - Rural indebtedness in a developing country such as Jordan can, depending on its type, be a reflection of either a healthy or an unhealthy agricultural sector. Rural indebtedness can be a reflection of a stagnating agriculture and, as we had occasion to mention earlier on, has been illustrated in many areas of the Middle East by the passing of land from the hands of its owner-cultivators to money-lenders. The destructive effect of such indebtedness can be fully realized when many of the previous owner-occupiers of land become merely sharecropper rentiers and thus lose any interest they may have had in improving or at least preserving the fertility of the land which they cultivate. On the other hand, agricultural development can involve on the farm level a need for credit to be "invested" rather than merely to sustain the farmer or provide him merely with seed in years of drought. At the outset of our period there was an absence of an effective medium for channelling the much-needed resources for farm development. In fact there were three official bodies engaged with limited resources in this field: the Agricultural Bank; the Bureau of Agricultural Credit of the Development Board; and the Co-operative Societies, which also depended for their funds on the Development Board. The government, realizing the emerging gap in the supply of agricultural credit and in order further to assist the success of major public irrigation schemes (e.g. the East Ghor Canal, the first part of which was completed in 1961), wet up in 1960 the Agricultural Credit Corporation (ACC) which took over the assets of the previously mentioned lending

agencies totalling JD 3,796,000 of which JD 3,370,000 were in loans outstanding. By 1966 total rural indebtedness in the Kingdom amounted to slightly over JD 14 million out of which JD 4.8 million was provided by the ACC and another JD 5 million by other official bodies. This compares with a total rural indebtedness of JD 3.4 million in 1955 out of which only JD 1.4 million was provided by various official bodies.

TABLE XVIII: Agricultural Debt Outstanding, 1955 and 1966

1955		1966	
Source	JD 000	Source	JD 000
Agricultural Bank	470	ACC$^{\phi}$	4,788
Jordan Development Board*	552	Co-operative Societies	1,202
Jordan Treasury‡	340	East Ghor Canal Authority	2,350
Loans secured by land mortgages	2,027	Loans secured by mortgages	5,902
Total:	3,389	Total:	14,242

* including JD 68,000 extended through co-operative societies.

‡ includes miscellaneous relief loans, seed propagation scheme, land settlement fees, irrigation projects.

ϕ excluding loans by Jordan Central Co-operative Union to co-operative societies.

Source: IBRD, op. cit., p. 133; FAO, op. cit., p. 101.

The ACC provides short-term loans through the Jordan Central Co-operatives Union (JCCU), which we will discuss presently, although it has the right to provide such short-term loans to non-members of the co-operative directly. Short-term was defined as not exceeding 5 years, with an upper limit of JD 500 per loan (except when co-operative

societies were concerned). The ceiling for medium-term loans (10 years maximum duration) was fixed at JD 3,000 each, and that for long-term loans (not exceeding 20 years except in special cases) at JD 6,000 each. The funds of ACC remained up to the end of 1963 dependent upon debt collections plus assistance from the Jordan Development Board (JD 100,000), from USAID Mission and from the Jordan Government (a loan of JD 200,000 extended in 1960 for re-lending to farmers adversely affected by drought). In 1963 a loan of $3 million was secured from IDA and in 1967 a further $3 million loan was obtained from the same source. The activity of ACC during the six-year period 1960/61 to 1965/66 is indicated in Table XIX.

TABLE XIX: The ACC: Capital, Debts Collected and Outstanding, Loans and Number of Borrowers, 1960/61-1965/66

Year	Capital (beginning of year)	Debts Collected	Loans Granted	Debt Outstanding* (end of year)	No. of Borrowers
1960/61	3,796	80	458	3,747	14,483
1961/62	4,750	427	470	4,313	2,618
1962/63	4,009	634	1,036	4,380	2,433
1963/64	4,114	450	903	4,774	3,480
1964/65	4,191	708	833	4,797	2,223
1965/66	4,288	691	1,207	5,270	2,650

* as a result of various additions and deductions debts outstanding differ from debts outstanding in the previous year plus new loans minus debts collected.

Source: FAO, op. cit., p. 103. Data derived from Agricultural Credit Corporation, Annual Reports, 1960/61 to 1965/66.

The larger part of the loans extended by ACC during this period went to finance development in the livestock sub-sector (livestock, poultry and bees) followed by irrigation works and terracing and reclamation. Interest charges on loans vary from 2 per cent on loans extended to the JCCU to 4 per cent on loans to individuals directly. However the latter rate was raised in 1964/65 to 5.25 per cent.

TABLE XX: Distribution of ACC loans by Purpose and Type, 1960/61-1965/66
(JD 000)

Purpose and Type	60/61	61/62	62/63	63/64	64/65	65/66	Total
Direct Loans by Purpose							
Terracing, reclamation, etc.	40	118	90	165	70	82	566
Tree planting	22	108	134	44	37	31	376
Livestock, poultry and bee raising	22	45	97	227	308	472	1170
Agricultural machinery and equipment	23	23	57	26	122	198	449
Irrigation works	50	74	81	215	146	231	797
Constructions	17	1	9	36	38	79	171
Sub-Total:	174	369	468	713	721	1084	3529
Other Loans by Type							
Unified loans	6	-	343	78	-	-	427
Loans to JCCU	45	36	176	91	111	96	555
Rural development	-	3	-	-	-	-	3
Short-term loans	232	63	49	-	-	-	344
Loans transferred to East Ghor Canal	-	-	-	21	2	10	33
Housing loans	-	-	-	-	-	17	17
Sub-Total:	283	102	568	190	113	123	1379
TOTAL:	457	471	1036	903	834	1207	4909

Note: Figures may not add up exactly because of rounding.
Source: FAO, op. cit., p. 104. Data derived from Agricultural Credit Corporation, Report, 1965/66.

Agricultural Co-operative Societies. - The setting up of the ACC represented a major step in the development of specialized credit institutions which were conspicuously absent from the financial market of the economy at the outset of our period. A further sphere where essential institutional development in the agricultural sector occurred was in the development of agricultural co-operative societies which were at the outset of our period hardly existent. In fact previous to 1952 there was no legislation to provide for such organizations and Law 39 of 1952 (replaced later by Law 17 of 1956) marks the starting point of this movement. While in 1953/54 there were only 50 such societies in Jordan their number had risen to 702 by 1965/66. Their membership increased from 2,000 to 43,000 members during that same period, and the extent of their spread is indicated when we compare the number of their members in 1965/66 with the number of agricultural holdings which was shown to be about 93,000 by the 1965 Agricultural Census (see Table XII). Table XXI indicates the rapid growth of this movement.

The Department of Co-operative Development of the Ministry of Social Affairs and Labour deals with the setting up, registration and supervision of the Societies. This department was established in 1952, and in 1959 the Jordan Central Co-operative Union (JCCU) was established, to provide funds to Societies, to assist in bulk purchases of Societies' requirements and in marketing their produce, in addition to supervising, inspecting and representing the Societies in international organizations.

TABLE XXI: Agricultural Co-operative Societies, 1953/54-1965/66

Year	Number of Societies*	Number of Members (000)	Capital JD000	Reserves JD 000	Deposits JD 000	Loans JD000	Average Loan per Member‡ (JD)
1953/54	50	2	9	3	-	44	21
1954/55	69	3	12	7	0.2	72	23
1955/56	134	6	39	11	7	63	27
1956/57	161	8	52	23	24	246	31
1957/58	209	12	81	39	37	467	40
1958/59	247	15	133	56	46	585	40
1959/60	255	15	169	57	71	641	42
1960/61	335	21	189	84	78	616	39
1961/62	428	29	221	124	89	622	37
1962/63	589	35	239	156	98	748	41
1963/64	636	41	308	151	135	1085	50
1964/65	688	44	293	173	118	1188	48
1965/66	702	43	333	190	136	1202	49

* excluding secondary societies.

‡ excluding school thrift societies.

Source: FAO, op. cit., p. 116. Data derived from Ministry of Social Affairs and Labour, Annual Report 1965/66.

The functions of the co-operative societies cover numerous fields in the agricultural sector and in some cases extend beyond strictly agricultural functions (e.g. handicraft and housing societies). Out of the total of 702 societies, 337 have agricultural functions in the strict sense and among these are the rural-credit and credit societies (which provide short-term loans and accept savings of members), agricultural wage societies (which assist members in reclaiming land,

developing water resources, and finance agricultural wages), multi-purpose societies (which help finance the purchase of irrigated farms to be run jointly), and other societies dealing in various agricultural activities such as poultry-raising, olive-oil-pressing, marketing, etc. Table XXII gives a classification of such societies in 1966 by type which shows that the largest number by far of societies were "rural credit and thrift" societies and the "agricultural wages societies". The societies obtain their funds (other than their members' savings) from the JCCU which, as we mentioned earlier, obtains its funds from the ACC at a rate of 2 per cent per annum. JCCU lends to the societies at 5 per cent per annum, while the societies in their turn extend loans to their members at 7 per cent.

Our description of the main institutional developments that accompanied the growth of production in the agricultural sector ends by considering the all-important marketing sphere. The growth of agricultural output has resulted in marked shortages in this sphere so that by the end of our period marketing facilities, or rather their inadequacy, came to be a main bottleneck confronting certain agricultural sub-sectors (e.g. vegetables and fruit production). A minor fraction of agricultural produce is marketed through direct sales to consumers or retail agents or through marketing co-operative societies e.g. the Jordan Valley Survey revealed that only 1 per cent of the produce was marketed in these mentioned ways).[1] Sale through municipal

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1. Ibid., p. 196.

TABLE XXII: Agricultural Co-operative Societies by Type and District (1966)

Type	Jerusalem	Nablus	Hebron	Irbid	Amman	Karak	Ma'an	Total
Rural Credit and Thrift	32	43	10	41	7	22	-	155
Agricultural Wages	22	18	18	11	19	10	8	106
Agricultural	4	5	3	10	2	2	-	26
Agricultural multi-purpose	1	3	6	2	8	-	-	32
Agricultural marketing	2	1	1	2	6	-	-	12
Agricultural industrialization	4	4	-	1	-	-	-	9
Labour - vocational	3	1	-	-	7	1	-	12
Handicrafts	2	2	-	-	-	-	-	4
Urban Credit and Thrift	11	2	1	2	8	2	1	27
Supplies (foodstuffs)	3	5	2	3	2	-	-	15
Housing	8	3	1	1	6	-	-	19
Transport	8	1	-	1	-	-	-	10
Mutual Benefit	3	1	-	2	12	-	-	18
Higher Education	1	-	1	-	-	-	-	2
Medical Insurance	1	-	-	-	-	-	-	1
Electrification	-	2	-	-	-	-	-	2
Irrigation	-	1	-	-	-	-	-	1
Central Unions	-	-	-	-	-	-	-	-
Sub-total:	105	92	43	76	89	37	9	451
School thrift	61	85	29	31	32	7	6	251
Grand Total:	166	177	72	107	121	44	15	702

Source: FAO, op. cit., p. 118. Data derived from Ministry of Social Affairs and Labour, Annual Report 1965/66.

markets via commission agents or sales to wholesale merchants and exporters represent the main marketing channels. The absence of an organized marketing system has been most harmful in the case of export marketing which was carried out on an individual, uncoordinated basis. The Bureau of Agricultural Marketing was set up in 1962 and in 1966 it was transformed into the Department of Agricultural Marketing directly connected with the Minister of National Economy. Its objects include the fixing and supervision of agricultural prices, the promotion of markets, and the supervision of sorting and packing. The Department has not so far played any active rôle in determining the prices or volume and direction of exports. In fact the FAO report has attributed the decline in vegetable production (mainly tomatoes) in 1966 to marketing inadequacies which have discouraged production within these agricultural sub-sectors. In fact this remains the sphere where organizational development is most needed especially as far as exporting is concerned. The intensive type of cultivation in the Jordan Valley can theoretically permit the export of off-season products not only to neighbouring countries but to more distant markets in Europe, as has been done by some of the neighbouring countries with similar seasons of production (Cyprus and Israel).

(e) The Jordan Valley. - As already mentioned in our study, the Jordan Valley was the area where most of the expansion in the irrigated area and intensive farming occurred during our period, so that by 1966 it contained about 85 per cent of the total irrigated area in Jordan (Table II). The sharp increase in the demand for food

that came in consequence of the events of 1948 stimulated the development of cultivation in the Valley through the use of pumps to draw water from either the River Jordan or from underground sources. This expansion of cultivation during the fifties was carried out through private initiative but by the late fifties it became apparent that further development required a more co-ordinated approach especially as it was reported that over-pumping of ground-water was starting to threaten its quality.

Numerous plans to develop the Jordan Valley have been in existence for many years, but political problems between the riparian states (the Arab countries on the one hand and Israel on the other) prevented the adoption or implementation of a unified plan. In 1958 the Jordan Government decided to proceed with its own plan to develop the eastern part of the Jordan Valley in an area of 120,000 dunums to be irrigated by a canal 70 kilometres long fed from the waters of the Jordan and Yarmouk rivers, in addition to water from several small side wadis (i.e. perennial streams draining into the Valley). The total cost of the project amounted to JD 7.5 million and work was commenced in 1958.

The pressure on land in the Valley through the development that occurred in the fifties is indicated by the fact that by 1961 only 32.5 per cent of the total farm area covered by the East Ghor Canal project was owned by its operators, the remaining part being share-cropped (39 per cent) or rented (Table XXIII). This contrasts

sharply with the comparable ratios for the country as a whole (see Table XIII) where the percentage of owned farm area was 76 per cent in 1953 and 65 per cent in 1965.

TABLE XXIII: East Jordan Valley: Number of Holdings and Area by Type of Tenure, 1961

Type of Tenure	Holdings		Area	
	Number	% of total	'000 dunums	% of total
Entirely Owned by Operator.....	830	24.8	67.5	32.5
Entirely Share-cropped.....	1,872	56.0	81.1	39.0
Entirely Leased.....	94	2.8	3.7	1.7
Mixed.....	343	10.3	42.0	20.2
Other.....	202	6.0	13.6	6.5
Total:	3,341	100.0	207.9	100.0

Source: FAO, op. cit., p. 94. Data based on Department of Statistics, The East Jordan Valley, A Social and Economic Survey (Amman 1961).

The first stage of the project was completed in 1961, and steps had already been taken to implement land reform in the area covered by the project. In fact the Jordan Valley was the only area where land reform was implemented in Jordan. As we have already seen, the distribution of land among the population does not show comparable inequalities to those prevalent in the neighbouring countries at the outset of our period, and no need has been felt to undertake large-scale redistribution of land ownership as occurred in Syria or Egypt, for example. Starting with Law 14 of 1959 several legislative measures were enacted to limit the size of ownership in the areas benefiting from

the East Ghor Canal and a flexible approach was adopted to take care of existing large ownerships. A minimum size of ownership was fixed at 30 dunums as it was felt that areas smaller than this will result in undue fragmentation. The maximum ownership was fixed at 200 dunums, and data covering an area of about 50 per cent of the total project area reveal that by 1967 a minor percentage of the total area (3.1 per cent) was still held in ownerships exceeding the maximum (Table XXIV). This contrasts sharply with data relating to the period prior to the implementation of the reform when ownerships between 500 and 1,000 dunums covered 14 per cent of the project area and ownerships in excess of 1,000 dunums covered another 9.6 per cent.[1]

TABLE XXIV: Distribution of Ownership* in East Ghor Canal Area after the Reallocation of Land, 1967

Size of Ownership (dunums)	Number of Landowners		Area Owned	
	Number	% of total	Number	% of total
30-50	1,046	74.9	34,860	54.8
51-62	128	9.1	7,480	11.8
63-130	195	14.0	16,230	25.5
131-200	19	1.4	3,700	4.8
over 200	8	0.6	1,970	3.1
Total:	1,396	100.0	63,600	100.0

* These data cover only 63,600 (or 52%) of the total 120,000 dunums of the project area. The remaining area of the project was almost completely allotted to new farmers but the final ownership classification records were not yet ready.

Source: FAO, op. cit., p. 98.

1. Ibid., p. 155.

The project was finally completed in 1966, and the East Ghor Canal Authority (replaced subsequently by the Natural Resources Authority) supervised the implementation of the reform laws. Ownerships below the minimum 30 dunums were brought up to the required level through the selling or leasing of land acquired by the Authority from large owners who were duly compensated for their lands.

As a result of this project, production and income were tremendously increased in the Valley through increassing yields per dunum. Accordingly a comparison of pre- and post-canal data reveals that net income per dunum in the project area increased by more than five-fold between 1959/60 and 1965/66 (Table XXV).

TABLE XXV: East Ghor Canal Project Area: Net Income per Dunum and Yield of Crops (Major) per Dunum in 1953, 1959/60, 1964/65 and 1965/66

	1953	1959/60	1964/65	1965/66
Net Income per Dunum (JD)	1.1	2.2	10.8	13.6
Average Yield per Annum (tons)				
Tomatoes	0.502	0.557	1.371	1.515
Banana	n.a.	1.316	1.400	1.709
Eggplant	0.970	0.983	1.433	1.614
Cucumber	0.194	0.353	0.577	0.705
Watermelon	0.479	0.396	1.000	1.580

Source: United States Agency for International Development, Agricultural Prodution and income in the East Ghor Irrigation Project Pre- and Post-Canal (Amman 1967), pp. 30-32.

The data reveal that although increases in yields and net income per dunum were achieved in the pre-canal period when progress was achieved through private initiative, the rate of increase was much lower than in the post-canal period. Thus while net income per dunum doubled between 1953 and 1959/60, it increased by more than five-fold from JD 2.2 in 1959/60 to JD 13.6 in 1965/66 (Table XXV). Similarly yields were increasing much more slowly in the earlier period as compared with the latter when, for example, the yield of tomatoes trebled between 1959/60 and 1965/66. In fact the development of intensive farming in the Valley contributed to the rapid expansion in agricultural exports which occurred during the latter period: the exports of tomatoes alone increased, as we shall see in that part of our study dealing with foreign trade, from JD 595,000 in 1960 to JD 1,899,000 in 1966 when their value amounted to 22 per cent of the total domestic exports of the country. The hot, semi-tropical climate of the Valley makes possible the production of off-season products which fetch high prices in the markets of neighbouring countries. However, as already mentioned in connection with our discussion of marketing, far-reaching potentialities exist in this respect through organizing marketing channels for exporting such early season products to neighbouring and other (European) markets.

CHAPTER V

CHAPTER V:

MANUFACTURING

TABLE I: Gross Domestic Product Originating in the Manufacturing Sector, 1954-1966 (at current factor costs)

Year	Total GDP JDm.	Manufacturing*		
		JDm.	Index	%age of GDP
1954	52.44	3.65	100	7.0
1955	47.89	4.52	124	9.4
1956	66.64	5.48	150	8.2
1957	68.57	5.92	162	8.6
1958	77.99	6.61	181	8.5
1959	85.17	6.89	189	8.1
1960	89.44	7.58	208	8.5
1961	110.87	9.50	260	8.6
1962	108.62	8.80	241	8.1
1963	117.67	11.55	316	9.8
1964	135.52	13.56	372	10.0
1965	150.95	17.90	490	11.8
1966	149.74	19.53	535	13.0
Percentage annual rate of growth 1954-56 to 1964-66:				14.1%

* includes mining, electricity and water supply.
Source: Chapter III, part 1, Table I (p. 41 supra).

(1) The Contribution of Manufacturing

Gross Domestic Product originating in the manufacturing sector

increased more than fivefold during our period from JD 3.65 million in 1954 to JD 19.53 million in 1966 (Table I). While, as we have already seen, total GDP rose at an average rate of 10 per cent per annum (in current terms) value added in manufacturing during the period under review increased at the rapid rate of 14 per cent annually. Accordingly the contribution of manufacturing to total GDP nearly doubled from a level of 7 per cent in 1954 to 13 per cent in 1966.

Details of value added in the various manufacturing (including mining) sub-sectors are available for the period 1959-1966 (Table II). These details show that food, beverages and tobacco have been, in terms of value added, the largest group of industries, contributing around one fifth of total value added in manufacturing.

This group of industries is followed in order of importance by the three sub-sectors containing the three largest industrial establishments in Jordan: "mining and quarrying" (containing the phosphates industry), "petroleum refining", and "non-metallic minerals" (containing the cement industry). In fact the "food" sub-sector contains the fourth largest industrial establishment in Jordan (vegetable oil refining). These sub-sectors together with "clothing and footwear" and "furniture and fixtures" account for about four fifths of total value added in manufacturing, and their rapid growth as we shall see has been behind the rapid growth of the manufacturing sector as a whole during these years. But before examining in detail the expansion, structure and other characteristics of manufacturing

TABLE II: Value Added in Manufacturing Sub-Sectors, 1959-1966
(percentage of total)

	1959	1960	1961	1962	1963	1964	1965	1966
Mining and quarrying	15.7	14.2	13.1	16.7	14.3	13.6	15.4	14.5
Food manufacturing	16.5	13.9	17.2	12.7	15.4	14.0	13.4	13.6
Beverages	2.6	2.8	2.8	2.7	2.7	1.8	1.5	2.1
Tobacco	4.5	4.8	4.0	4.3	5.2	7.8	4.9	4.9
Textiles	3.5	3.0	3.9	1.4	2.9	4.2	3.7	4.5
Clothing and footwear	15.4	12.8	12.3	13.7	10.9	10.1	8.5	8.0
Wood and cork	0.5	0.4	0.3	1.0	0.2	0.2	0.6	0.3
Furniture & fixtures	9.2	8.0	6.7	5.2	7.3	6.8	6.7	7.5
Paper & paper products	0.3	0.3	0.3	0.6	0.2	0.4	0.5	0.6
Printing & publishing	2.3	1.9	1.5	2.7	2.1	2.1	2.1	1.9
Leather & leather products	0.3	0.3	0.2	0.9	0.8	0.7	1.1	1.5
Rubber & rubber products	0.8	1.3	0.5	0.4	0.3	0.2	0.3	0.3
Chemicals and chemical products	1.1	1.2	1.3	1.6	1.5	2.9	4.2	4.7
Petroleum refining	-	-	11.2	13.3	11.5	11.7	12.2	12.4
Non-metallic mineral products	14.0	22.5	16.4	16.9	13.1	12.5	11.7	12.5
Basic metal products	4.8	5.2	4.0	3.0	6.0	5.4	6.9	5.7
Non-electrical machinery	0.7	0.7	1.5	1.0	0.4	0.2	0.1	0.1
Electrical machinery	0.5	0.4	0.5	0.1	1.0	1.2	1.4	1.2
Transport equipment	2.7	2.5	2.0	1.6	2.7	2.4	3.1	2.5
Miscellaneous	4.7	3.9	0.3	0.3	1.5	1.8	1.7	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Percentages calculated from data given in National Accounts 1959-1966, p. 36.

industry we shall briefly survey the overall factors that have been affecting the development of manufacturing in the Jordan economy during our period.

(2) Factors Affecting the Growth of Manufacturing

The growth of manufacturing during 1948-1966 can be considered as being primarily determined by two sets of factors: firstly the events of 1948 which precipitated in this respect what might be termed a shift in the geographic location of Palestinian Arab industry; and secondly, and as our period progressed, the exploitation of the increasing possibilities for import substitution.

(a) The Events of 1948. - Prior to 1948, and as already mentioned in the thesis, the economies of Jordan and Palestine under the British Mandate were closely linked, the former supplying the latter with its excess agricultural produce and receiving a variety of manufactures either directly from Palestinian industry or from overseas and through Palestine. Under the Palestine-Transjordan Trade Agreement of 1928[1] no customs barrier was erected between the two countries, and Jordan's imports of foreign goods were allowed to pass duty-free in transit through Palestine. Trade between these two territories was further stimulated through the provision of the Agreement that "Palestine shall pay to the Trans-Jordan Government, in

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1. For details of this Agreement see Government of Palestine, Survey of Palestine: Part I, 1945-1946, pp. 442-443.

respect of duties collected in Palestine on goods subsequently exported to and consumed in Trans-Jordan, a sum approximating to the duty collected in Palestine less the duty collected in Trans-Jordan on goods entering directly into that territory and subsequently exported to and consumed in Palestine.[1] Only tobacco, intoxicating liquors and alcohol were excluded from this arrangement.

During the Mandate, Palestine became relatively more industrialized than any of the neighbouring territories. Although the Palestinian economy as a whole followed a dualistic pattern of development, with the division of the economy into Arab and Jewish sectors, the former being predominantly agricultural with industrial activities being mainly concentrated in the latter, manufacturing in the Arab sector itself became relatively more advanced than in most other Arab countries. As early as 1936, manufacturing accounted for 13.5 per cent of product and 8.4 per cent of employment in the Arab sector of Palestine.[2] This compares with manufacturing accounting for only 11.8 per cent and 13 per cent of product in Lebanon and Syria respectively as late as 1962.[3] In Jordan, as we have seen, the product share of manufacturing reached 13 per cent only as late as 1966, and its employment share was 10 per cent in 1961 as revealed by the

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1. Ibid., p. 443.
2. E. Kleiman, "The Place of Manufacturing in the Growth of the Israel Economy," Journal of Development Studies, Vol. 3, No. 3, p. 230.
3. U.N., Economic Developments in the Middle East 1961-1963, New York 1963, p. 28.

population census of that year which we have already examined in Chapter II.

Within Palestine, industry was located mainly along the coastal strip where power and labour were in more adequate supply. Not only east Jordan, but also eastern Palestine (which later became the west bank of Jordan) relied heavily upon the products of this manufacturing industry. However, after the Arab-Israeli war of 1948 and the Armistice that followed, "the major centres of trade and industry [in Palestine] were in the area that became part of Israel."[1] Consequently, and as the flow of trade across the armistice line completely ceased, both east Jordan and east Palestine were cut off from their traditional sources of supply of manufactured goods. While this disruption occurred it ought to be kept in mind that both east Jordan and east Palestine hardly had any indigenous manufacturing industry as they formed the agricultural area of the economic framework that existed prior to 1948 as we have just described.

The ability of the economy of Jordan to respond to whatever excess demand for manufactures materialized in consequence of the events of 1948 was, however, dramatically enhanced as a result of these events themselves. Firstly the cessation of trade with Palestine, the disruption of the direct lines of communication with the outside world through the Mediterranean ports of Palestine, and the resultant

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1. IBRD, The Economic Development of Jordan (Baltimore 1957), p. 41.

heavy transport costs after 1948 "have encouraged the establishment and expansion of industries serving needs that might otherwise have been met from the coastal region or from abroad."[1] Secondly, the refugees brought with them in addition to some capital many of the skills previously employed in Palestinian industry. Accordingly a very rapid expansion of manufacturing activities occurred to provide many of the basic needs previously met by Palestinian industry (e.g. the food industry such as grain mills, olive oil presses, clothing, footwear, furniture, etc.). As the IBRD mission put it, "In this expansion a major contribution has been made by Palestinians previously engaged in similar activities. The experience and ability of businessmen and the labour force, together with the protection afforded by /higher/ transport costs, have overcome some of the disadvantages of expensive power and scarcity of water and raw materials of good quality to produce a rapid expansion of various industries."[2]

Lack of statistical data covering this early period prevents a detailed examination of the extent and nature of the development of manufacturing in those years. The first industrial census in Jordan does not come until 1959,[3] but certain data included in it can provide an indication of the rapid expansion of manufacturing activity in the

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1. Ibid., pp. 47-48.
2. Ibid.
3. Department of Statistics, Manufacturing Industry in Jordan: Report on the Industrial Census of 1959 (Amman).

early fifties in Jordan. The figures showing the year of commencement of production of the manufacturing establishments covered by the 1959 Census show a sudden and large jump in 1950 (Table III) which amounted to about one third of the total number of establishments in operation at the outset of that year.

TABLE III: Establishments Operating in 1959 Classified by Year of Commencing Production

Year of Commencing Production	No. of Establishments
before 1950	1,804
1950	544
1951	133
1952	287
1953	257
1954	316
1955	546
1956	531
1957	676
1958	853
1959	940
	Total: 6,887

Source: Report on the Industrial Census of 1959, op. cit., p. 9.

Although no details of investment, employment, output, etc., are available for these initial years, the figures in Table III support what one assumes to have occurred in this sphere as a result of the combination of all the factors described so far in connection with the

events of 1948. As we have already mentioned, the expansion of manufacturing in this early period can be perhaps best described or viewed as a shift in the location of at least part of the Palestinian Arab industry.

(b) Import Substitution. - After the initial stimulus for the expansion of manufacturing ~~in~~ which the events of 1948 precipitated there came the stimulus of the rapidly expanding market for manufactures that occurred in Jordan during the 1950s. The increasing inflow of foreign assistance made possible a rapid expansion in imports and the value of consumption goods imports (excluding processed and unprocessed foodstuffs) increased from about JD 5 million in 1950-1951 to about JD 13 million by 1958-1959.[1] While trends in imports will be analysed separately in that part of our study dealing with foreign trade, it here suffices to say that the rapid expansion in the market for manufactures which was largely dependent upon imports provided numerous possibilities for the setting up of import-substituting industries. Positive steps were undertaken by the government to assist the private sector in developing for the first time in Jordan modern, capital-intensive and relatively large (that is by Jordan's standards) import-substituting industries which until this day form the backbone of Jordanian manufacturing industry: from

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1. Department of Statistics, Foreign Trade in the Jordan Economy 1950-1966 (Amman 1967), p. 27 (Arabic).

the mid-fifties onwards and in quick succession such industries as cement, vegetable oil, petroleum refining, leather tanning, pharmaceuticals, cloth weaving, paper-making were all established as joint-stock private enterprises assisted by the government through participation in equity, tariff protection and other special legislative measures which are examined in that part of our study dealing with the Finance of Development. As a consequence, although the imports of consumption goods continued to rise (consumption goods imports excluding foodstuffs increased from JD 13 million in 1958-59 to JD 21 million in 1964-65),[1] imports of intermediate goods and raw materials show a swift increase both in absolute terms and in relation to the total imports of the country. While imports of intermediate and raw materials accounted for between 13 per cent and 18 per cent of total imports of goods during 1950-1958, their percentage share rose to between 24 per cent and 31 per cent during 1959-1965. And in absolute terms, the value of such intermediate imports increased from only about JD 2 million in 1950-51 to about JD 8 million in 1958-59 and to JD 16 million by 1964-65.[2]

One of the consequences of this development of import-substituting industries has been the emergence of a heavy dependence in the Jordan economy on imported inputs since there is an absence of raw materials

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1. Ibid.
2. Ibid., p. 22.

in general in Jordan. As we can see from Table IV, total imported intermediate inputs amounted to about 40 per cent of total (domestic and imported) intermediate inputs during 1963-1966, and about 60 per cent of these imported inputs have been going to the manufacturing sector.

TABLE IV: Total and Imported Inputs, 1963-1965 (at cost)*

	1963	1964	1965	1966
Total Inputs (JDm.)	33.6	39.1	41.3	48.0
Imported Inputs: JDm.	14.9	14.7	17.6	20.3
Percent. of Total ..	44	38	41	42
Imported Inputs Utilized by the Manufacturing Sector: JDm.	9.0	9.5	10.5	12.2
Percent. of Total Imported Inputs	60	65	60	60

* i.e. excluding customs duties and other indirect taxes.

Source: Department of Statistics, Foreign Trade in the Jordan Economy 1950-1966 (Amman 1967), pp. 41, 43; figures for 1966 from the National Accounts, pp. 85-86.

Thus in the absence of local raw materials in general, the high and rapidly increasing level of consumption goods imports which stimulated or rather made feasible the establishment of import-substituting industries has led ultimately to a shift from the outright import of such goods in their finished form to the import of the raw materials that go to the manufacture of such goods in the import-substituting industries.

So far we have seen how both the events of 1948 initially, and rapid import substitution subsequently, have been the main overall factors behind the rapid growth of manufacturing in the Jordan economy during our period. However, at this juncture, mention ought to be made of a third factor, viz., the export of manufactured goods, which has had, especially more recently, increasing importance in further stimulating the expansion of the manufacturing sector. Other than the expansion of the phosphates mining industry, the output of which has been entirely directed towards exports, a variety of manufactured items (e.g. cigarettes, paper products, batteries) show an increasing share in the total domestic exports of the country. Although exports and their composition are examined elsewhere in our thesis, Table V serves to illustrate the increasing importance of the exports of such manufactured products which by the end of our period start to account for about one half of total exports.

While total domestic exports increased by about JD 5.6 million between 1958 and 1966 (from JD 3.3 million to JD 8.8 million), the largest part of this increase (about JD 3 million) came from the increased value of phosphates and manufactured goods products. In the early fifties such exports were hardly existent, in the case of phosphates for example being at a level of only JD 25,000 and JD 50,000 in 1952 and 1953 respectively.[1] In the latter part of our period

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1. Ibid., pp. 60-64.

TABLE V: Exports of Mining and Manufactured Products 1958-1966

Year	Mining Products*		Manufactured Products	
	JD000	Percentage of Total Exports‡	JD000	Percentage of Total Exports‡
1958	1,028	33	136	4
1959	1,051	34	206	7
1960	1,346	39	206	6
1961	1,660	39	246	6
1962	1,568	32	272	6
1963	1,537	28	618	11
1964	2,470	35	1,022	15
1965	2,547	33	982	13
1966	3,258	37	1,026	12

* mainly phosphates. ‡ domestic exports only.

Source: Foreign Trade in the Jordan Economy, p. 61.

value added in the mining sub-sector accounted for over 10 per cent of total value added in manufacturing (Table II), and the phosphates industry became one of the four largest industries in terms of product and employment.

So far in this part of our study we have been examining the overall trends in the manufacturing sector, and the major factors affecting these trends. After examining the swift growth of value added within this sector and its increasing importance in the economy, we then discussed the two main factors behind the growth of manufacturing (the events of 1948 and import substitution) to which a third

factor (exports) was added. Before we proceed to examine the structure and organization of industry that have emerged in consequence of this growth, we take a look at the available data relating to the output of the main industries during our period (Table VI), which help indicate further the magnitude of growth within the manufacturing sector.

TABLE VI: Growth of Production Selected Industries, 1956-1966

Year	Phosphates		Cement		Petroleum Refinery*		Vegetable Oil		Alcoholic Beverages#		Cigarettes		Electricity∅	
	000 tons	Index	000 tons	Index	000 tons	Index	tons	Index	000 litres	Index	tons	Index	million KWH	Index
1956	208	100	79	100					626	100	605	100		
1957	262	126	107	135					630	101	765	126		
1958	294	141	114	144					1065	170	737	122		
1959	338	163	110	139					1267	202	861	142		
1960	362	174	165	209					1612	258	946	156		
1961	423	203	223	282	205	100			1491	238	956	158		
1962	681	327	235	297	275	134	3198	100	1442	230	1020	169	91	100
1963	614	295	285	361	304	148	5976	187	1570	251	1045	173	101	111
1964	565	272	308	390	337	164	5821	182	1738	278	1462	242	120	132
1965	828	398	305	387	379	185	5533	173	1944	311	1164	192	138	152
1966	1036	498	374	473	426	208	6436	201	2425	387	1502	248	154	169

* total of all refined products. The first year of production was 1961.
\# spirits, wine and beer. ∅ total electric energy consumed from the total generated by municipalities, electric companies and manufacturing industries. Data prior to 1962 not available.

Source: Statistical Yearbook, relevant years.

The production of phosphates increased by nearly fivefold over the ten years 1956-1966, and cement production shows a slightly smaller expansion over the same period. While production in the former industry has been entirely directed towards exports, production in the cement industry reflects the rapid growth of construction activity that occurred during our period. The petroleum refinery, which commenced production in 1961, doubled its output in the five-year period 1961-1966. The output of the vegetable oil refinery (which started production in 1962) also doubled in the four years up to 1966. The establishment of modern breweries is behind the rapid growth in the production of alcoholic beverages, and the cigarette industry (which was the only relatively large manufacturing industry in Jordan prior to 1948, having been established as early as the 1920s) also shows a rapid growth in its output especially in the sixties. The absence of cheap sources of energy, such as coal or possibilities for large hydro-electric schemes, has been one of the main obstacles facing the development of manufacturing industry. The generation and consumption of electric energy has been however rapidly expanding and plans exist for the creation of a national grid system the implementation of which will help reduce the constraining effect of this lack of natural sources of energy.

(3) The Structure of Manufacturing Industry

The first industrial census to be ever undertaken in Jordan was that of 1959 to which we have already referred. Table VII compares its

TABLE VII: Manufacturing Industry, 1959 and 1965

	Number of Establishments		Number Employed		Wages JD000		Sales JD000		Value Added JD000		Fixed Assets JD000	
	1959	1965	1959	1965	1959	1965	1959	1965	1959	1965	1959	1965
Mining		208		3962		1258		3423		2492		1396
of which Phosphates		1		1021		291		1594		1057		921
Food Manufacturing	1280	1736	4951	7687	257	627	2912	8696	980	2173	1676	3358
of which Grain mills	288	368	771	1110	56	138	729	2304	135	355		1129
" " Vegetable oil		1		129		41		1150		280		298
Beverages	17	19	796	388	37	98	261	539	157	250	317	724
Tobacco	6	5	396	886	130	251	2093	2573	1245	799	440	583
Textiles	103	101	1345	1992	40	290	362	1897	224	604	123	1220
Clothing and footwear	1263*	1520	4104*	4718	195*	444	1411*	3108	731*	1377	275	530
Wood products and furniture	840	1044	2562	3927	142	374	1007	2471	595	1178	246	1014
Paper and paper products	14	14	87	261	3	28	37	280	20	80	10	142
Printing and publishing	39	72	710	1163	62	191	270	661	166	340	186	1039
Leather and leather products	35	45	122	313	12	69	97	665	62	184	175	459
Rubber and rubber products	14	60	51	152	4	7	16	53	16	39	20	29
Chemicals and chemical products	25	48	224	1043	11	146	178	169	66	684	104	1300
Petroleum refinery		1		775		379		4639		1976		2588
Non-metallic mineral products	129	194	1359	2204	175	422	1280	3175	867	1901	2217	3570
of which Cement	1	1		510		189		2098		1369		3065
Basic metal products	670	1050	2046	4194	83	409	630	2266	301	1117	128	1156
Non-electrical machinery	32	4	294	67	30	8	69	38	71	17	101	6
Electrical machinery	69	207	185	733	5	70	18	561	41	219	8	279
Transport equipment	190	290	806	1630	74	154	160	746	203	501	141	273
Miscellaneous	220	220	738	999	37	81	422	602	286	283	42	106
Total:-	4992	6838	21173	37094	1305	5266	11441	33356	6121	16214	6209	19772

* excluding '1 person tailors and dressmakers' establishments.

Source: Report on the Industrial Census, 1959; Industrial Census 1965.

findings with those of the subsequent Census of 1965[1] regarding employment, output and capital assets of the various manufacturing industries in Jordan in these two years.

These figures reflect the extent and nature of the expansion of manufacturing industry that occurred during the six-year period between the two censuses. The total annual wages paid by industry, (excluding mining), the value of total sales and of total capital assets trebled between 1959 and 1965. In contrast total employment and value added in manufacturing industry increased by a relatively smaller amount: the former increasing by 57 per cent and the latter by 124 per cent (Table VIII). Thus in its rapid expansion manufacturing industry is becoming more capital-intensive, having a higher ratio of inputs to net output and employing more highly paid (and thus more highly skilled) labour: capital assets and wages increased much more rapidly than the number of persons employed, thus reflecting the use of more capital-intensive methods of production and the employment of higher skills; and gross output increased more rapidly than net output (i.e. sales increased more rapidly than value added), thus reflecting the increasing importance of inputs of raw and intermediate materials into the manufacturing process.

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1. Department of Statistics, Industrial Census 1965 (Arabic) (Amman 1967). While the 1959 Census included domestic dressmakers, such establishments were excluded from the 1965 Census. Accordingly we exclude the "1 person tailors and dressmakers" establishments (numbering 1895) from the 1959 data as indicated in various tables to render it more comparable to that of 1965. The 1959 Census did not cover mining industry.

TABLE VIII: The Development of Manufacturing Industry, 1959* & 1965‡

Year	Number Employed	Wages JD000	Sales JD000	Value Added JD000	Fixed Assets JD000
1959	21,173	1,305	11,441	6,121	6,209
1965	33,132	4,008	34,933	13,722	18,376
Percentage increase 1959-1965	57	307	305	224	296

* excluding "1 person tailors and dressmakers". ‡ excluding mining.

Source: Table VII.

When we look more closely at the data in Table VII we find that the development of the new import-substituting industries which we discussed earlier lies behind the changing relationships between the various factors shown in Table VIII. These new industries contrast quite sharply with the old traditional industries in their levels of technology as reflected by differences in factor mix (labour and capital) and by differences in the productivity of labour (as measured in terms of "value added" and "wage" per employee).

As we can see from the comparison of certain sub-sectors from both categories (i.e. traditional industries such as food and clothing on the one hand and modern industries such as petroleum refining and cement on the other: Table IX), the ratio of labour to capital contrasts sharply between, for example, the food industry and the petroleum or cement industries. While the food industry employs

TABLE IX: Manufacturing Industry: Selected Sub-sectors, 1959 and 1965 (percentages of total)*

	Number Employed		Wages		Sales		Value Added		Fixed Assets	
	1959	1965	1959	1965	1959	1965	1959	1965	1959	1965
Food	23.4	23.2	19.7	15.6	25.5	24.9	16.0	15.8	27.0	18.3
Clothing and footwear ..	19.4	14.2	14.9	11.1	12.3	8.9	11.9	10.0	4.4	2.9
Wood and furniture	12.1	11.9	10.9	9.3	8.8	7.1	9.7	8.6	4.0	5.5
Petroleum refinery ..	-	2.3	-	8.5	-	13.3	-	14.4	-	14.1
Non-metallic minerals ..	6.4	6.7	13.4	10.5	11.2	9.1	14.2	13.9	35.7	19.4
of which Cement* ..		1.5		4.7		6.0		10.0		16.7

* refers to total for all industry (excluding mining) as shown in Table VII.

* cement is not given separately from non-metallic minerals in 1959.

Source: Table VII.

about a quarter (23 per cent) of the total industrial labour force in both 1959 and 1965 the value of its capital assets is lower than that of the non-metallic minerals industry (containing the cement industry) which employs only about 6 per cent of the total industrial labour force in both these years. In 1965 the cement industry alone which employed only 15 per cent of the total number employed in manufacturing had capital assets (16.7 per cent of total) of about the same value as that of the capital assets of the food industry (18.3 per cent of total) which employed nearly a quarter of the industrial labour force.

Similarly when we look at wages and value added we can see that the only petroleum refinery in Jordan contributed in 1965 a comparable percentage (14.4 per cent) of total value added to that contributed by the food industry (15.8 per cent) and its share of the total wages bill was about four times its share in the labour force while the share of the food industry in the wages bill (15.6 per cent) was much lower than its share in the labour force (23.2 per cent) The average value of fixed assets per worker in petroleum refining was JD 6,787 or more than ten times its level of only JD 437 in the food industry, and the average value added per worker in the former industry (JD 2,550) was about ten times that in the latter (JD 283). The average annual wage per employee in the food industry (JD 82) was about one sixth of its level in the petroleum refining industry (JD 489).

As a consequence of the development of these modern import-substituting sub-sectors, a noticeable change occurred in the structure of manufacturing industry as a whole between the years 1959 and 1965. Larger units of production (as measured in terms of employment) were gaining in importance in terms of their share in wages, sales and value added at the expense of the smaller and medium-sized establishments (Table X). Thus establishments employing one hundred or more persons increased their share in the total wage bill of industry from 18 per cent in 1959 to 30 per cent in 1965, their share of total sales rose from 27 per cent to 39 per cent and their contribution to value added increased from 30 per cent to 42 per cent during this same period.

TABLE X: Structure of Manufacturing Industry, 1959* and 1965‡

Size		No. of Establishments		Number employed		Wages		Sales		Value Added	
		No.	%	No.	%	JD000	%	JD000	%	JD000	%
Establishments employing 1-49 persons:	1959	4966	99.5	...		922	71	7648	66	3969	65
	1965	6789	99.3	29417	79	3348	64	21297	56	8770	54
Establishments employing 50-99 persons:	1959	17	0.3	...		149	11	767	7	329	5
	1965	28	0.4	1729	5	325	6	2070	5	676	4
Establishments employing 100 or more persons:	1959	9	0.2	...		234	18	3029	27	1823	30
	1965	21	0.3	5948	16	1583	30	14989	39	6768	42

* excluding "1 person tailors and dressmakers". ‡ including mining.
"..." denotes data not available.

Source: Report on the Industrial Census of 1959; Industrial Census 1965.

The rapid development of manufacturing industry is indicated by the fact that in the relatively short period between 1959 and 1965 the "typical" unit of production doubled the value of its capital assets, and the average value of fixed assets per worker nearly doubled (Table XI). Moreover, in these six years the average annual wage per worker doubled from JD 62 to JD 121, and the value added per worker increased by 43 per cent from JD 289 in 1959 to JD 414 in 1965, i.e. increasing annually at an average rate of 6.1 per cent.

TABLE XI: Manufacturing Industry: Fixed Assets per Establishment and per Worker, and Value Added and Annual Wage per Worker 1959 * and 1965 ‡

	1959	1965
Average value of fixed assets per establishment (JD)....	1244	2772
Average value of fixed assets per worker (JD).....	293	555
Average value added per worker (JD).....	289	414
Average annual wage per worker (JD).....	62	121

* excluding "1 person tailors and dressmakers". ‡ excluding mining.

In this respect there is a sharp contrast between the manufacturing sector on the one hand and the agricultural sector on the other. Although no comparable data exist for the agricultural sector over these years as far as value added per worker is concerned, whatever data there are indicate firstly a lower level of value added per worker and, secondly, a much lower rate of increase of the average value added per worker in the agricultural sector. If the data of the 1961 Census of population (relating to the industrial distribution of the labour force) are utilized together with the GDP data given in Chapter III, then we obtain an average value added per worker (in 1961) of JD 183 in the agricultural sector and of JD 234 in the manufacturing sector. However, as indicated in the report on the Population and Labour Force in the Agriculture Sector (1967)[1] to

1. Department of Statistics, Amman 1968, pp. 33-34 (Arabic).

which we have referred in the relevant parts of our study, the figure of the labour force in the agricultural sector given by the 1961 Census excludes the larger part of female family labour which, it is estimated, may have represented an additional 20-30 per cent of the labour force figure given for that year. Thus, if an accordingly adjusted estimate is utilized, we obtain an average value added per worker of JD 119 in 1961 in the agricultural sector. For 1966 (if we utilize the findings of the 1967 report) we obtain only a slightly higher figure (JD 126) of the average value added per worker in agriculture thus indicating a much slower rate of increase than that of value added per worker in the manufacturing sector which was increasing at an average rate of 6.1 per cent per annum during 1959-1966 as we saw in connection with Table XI.

However, one ought to remember that, as we have seen in Chapter III in examining the growth of GDP, and its structure, sectoral interdependence in the Jordan economy was greatly reduced as a result of the special conditions (of import surplus) within which the economy was permitted to grow. Accordingly the growth of the manufacturing sector was not closely constrained by performance in the agricultural sector and indeed, manufacturing expands very rapidly during 1954-1960 when agricultural output fails to register any increase. And furthermore the growth of manufacturing activity has not been crucially dependent upon the release of resources (labour and capital) from the agricultural sector, as reliance could be, and indeed was, placed on

the large pool of unemployed amongst the refugees. To be sure, as we described previously in this part of our study, the movement of skills and resources that resulted from the movement of the refugees initially resulted in a wide expansion of manufacturing activity which accordingly did not require or involve any release of resources from the agricultural sector.

A further interesting factor which may have contributed to the swift growth of value added in manufacturing is the condition of excess demand within which manufacturing industry was developed. In part II of Chapter III mention was made of the "exposure" of the domestic sectors of the economy in Jordan to a high level of aggregate demand for a prolonged period. One way in which such a condition can contribute to the rapid growth of value added in manufacturing is, apart from stimulating the development of the manufacturing sector itself, through the fuller utilization of capacity in which a level of high demand may ensue. The Census of 1965 in fact revealed that 64 per cent of all establishments (employing ten or more persons) utilized 100 per cent of their productive capacity during that year.[1] Comparable figures in the case of India, for example, reveal that during 1957-1964 only between 17 per cent and 27 per cent of industrial establishments utilized 100 per cent of their productive capacity.[2]

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1. Industrial Census 1965, p. 82.
2. U.N. World Economic Survey 1965 (New York 1966) Part I, p. 77.

Such a relatively high rate of capacity utilization in the manufacturing industry in Jordan while accelerating the rate of growth of value added in manufacturing would simultaneously contribute to one of the main characteristics of the development of the Jordan economy during our period, viz. the extremely low incremental capital output ratio of the economy. Mention has already been made of this fact which will be examined in the relevant part of our study dealing with the Finance of Development.

Mention ought to be made at this juncture of the fact that the conditions of high demand within which the manufacturing sector developed do not per se stimulate the expansion of manufacturing activities. Indeed, the relatively "free" inflow of imports to meet the excess demand for manufactures could in itself discourage the development of local industry as a result of its inability to compete with the more efficient foreign industries especially when we bear in mind the narrowness of the Jordan market and the absence of local raw materials generally. However, the way in which these conditions of high demand and of a large import surplus stimulated the development of manufacturing industry stemmed from the positive steps which the government undertook to permit the private sector to exploit the expanding market for manufactures. As already mentioned, the government provided assistance in the form of participating in the finance of industrial development, in providing tariff protection and other incentives (tax holidays, accelerated depreciation, etc.) which

together were instrumental in enabling the private sector to develop its manufacturing industry. These aspects of the development of industry are all examined in detail in that part of our study dealing with the Finance of Development and therefore only mention of them is made here.

Now to return to the changes that occurred within the manufacturing sector as a result of its rapid expansion, a noticeable change has occurred in the economic status of the labour force of this sector. The development of the modern sub-sectors and the relative decline of the traditional sub-sectors have been reflected in an increasing proportion of wage-earners in the industrial labour force and a declining proportion of self-employed, home and family workers (Table XII).

TABLE XII: Employment in Manufacturing Classified by Economic Status, 1959 and 1965

Economic Status	1959 *		1965 ‡	
	Number	% of total	Number	% of total
Own Account	6273	29.6	8237	24.9
Family Workers	1425	6.7	1320	4.0
Home Workers	374	1.8	208	0.6
Employees	12404	58.6	23367	70.5
n.a.c.	697	3.3	-	-
Total:	21173	100.0	33132	100.0

* excluding "1 person tailors and dressmakers". ‡ excluding mining.

Source: Report on the Industrial Census of 1959; Industrial Census 1959.

Thus while in 1959 employees (i.e. wage-earners) accounted for 58.6 per cent of the total number employed in manufacturing, in 1965 their proportion increased to 70.5 per cent. The self-employed (own account) workers associated with traditional (handicraft) industries show a declining proportion from 29.6 per cent in 1959 to 24.9 per cent in 1965. Family and home workers show a decline not only in their percentage ratio in the labour force, but also in absolute numbers (see Table XII). However, an unchanged characteristic of the industrial labour force is the low ratio of female participation which amounts to no more than 5 per cent of the total number employed in manufacturing in 1965. Indeed as we saw in the chapter dealing with population and the labour force, the participation of the female population in the labour force in general is very low in Jordan, and the low ratio of women in the industrial labour force can only, therefore, be expected. In 1965, out of the total number of 33,132 persons employed in manufacturing, the Industrial Census of that year revealed that only 1,597 were females.[1]

(4) Location of Manufacturing Industry

An important aspect of the rapid expansion of the manufacturing sector is the heavy concentration of most of this expansion in one geographic region: around the capital, Amman. As was mentioned at

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1. Industrial Census 1965, p. 16.

the outset of this part of our study, a shift in the geographic location of Palestine Arab industry occurred in consequence of the events of 1948. The earliest data relating to the question of geographic location are those of the 1959 Census, which shows that the west bank in that year had a larger share (in terms of number of establishments and employment) than the east bank in manufacturing industry. Nevertheless, the rising importance of Amman district (in which most of the import-substituting industry that was subsequently developed was to be located) is indicated by the fact that by 1959 it had a larger share in employment than any other region (Table XIII).

TABLE XIII: Location of Industry 1959 *

District	Establishments		Employment	
	Number	% of total	Number	% of total
Amman	906	20.4	6,566	35.2
Balqa	194	4.4	343	1.8
Irbid	479	10.8	1,203	6.4
Karak	75	1.7	134	0.7
Ma'an	45	1.0	78	0.4
Nablus	1,171	26.3	3,790	20.4
Jerusalem	1,264	28.4	5,656	30.3
Hebron	309	7.0	887	4.8
Total:	4,443	100.0	18,657	100.0

* excluding "tailors and dressmakers".

Source: Report on the Industrial Census of 1959.

The heavy geographic concentration of manufacturing industry came with the development of the modern import-substituting industries. The main part of the new industries was located around Amman, the concentration being heaviest in the case of the large establishments. Thus while 42 per cent of all establishments employing ten or more persons were found by the 1965 census to be located in Amman district, 85 per cent of the establishments having fixed capital assets to the value of JD 250,000 or more were located in Amman district. There were (13) such establishments in the whole of Jordan and (11) of them were in Amman district. As far as other parts of the country were concerned, although the west bank still had in 1965 a larger share (53 per cent) than the east bank in the number of establishments (employing ten or more persons), the value of fixed assets and the value added in these establishments were only 14 per cent and 17 per cent respectively of the total for all establishments (see Table XIV). In fact Amman district alone had a share of over 80 per cent of the value added and value of fixed assets of all establishments (employing ten or more persons) in 1965.

This pattern of geographic location along which manufacturing industry developed was one of the factors behind the pattern of internal migration of the population which we examined in Chapter II. Furthemmore the extent of this concentration in geographic location itself is partly a reflection of the type of industry which was developed: import-substituting industry based on the manufacturing

TABLE XIV: Location of Industry 1965 *

District	Establishments		Fixed Assets		Value Added	
	Number	% of total	JD000	% of total	JD000	% of total
Amman	250	42	13950	84	8728	82
Balqa	1	-	1	-	2	-
Irbid	31	5	98	1	93	1
Karak	3	-	10	-	15	-
Ma'an	1	-	-	-	6	-
Nablus	136	23	1063	6	694	7
Jerusalem	152	26	1344	8	900	9
Hebron	22	4	141	1	108	1
Total:	596	100	16607	100	10546	100

* establishments employing 10 or more persons.

Source: Industrial Census 1965.

of imported raw materials and intermediate products. Apart from the few cases where local raw materials were utilized (e.g. in the case of the cement and phosphate industries), there were relatively few factors to compete with the "pull" of the centre (i.e. the pull of the capital) in determining the location of industry.

CHAPTER VI

CHAPTER VI:

FOREIGN TRADE AND THE BALANCE OF PAYMENTS

(1) Foreign Trade

Details of the value of imports and exports (both domestic and re-exports) of goods and the balance of trade during 1950-1966 can be seen from Table I. Two main facts readily emerge from these data: the very swift increase in both imports and exports and the very large and persistent trade gap.

Imports increased in value by over six-fold from JD 10.8 million in 1950 to JD 68.2 million in 1966 while domestic exports increased by slightly less than sixfold from JD 1.5 million in 1950 to JD 8.8 million in 1966. The trade gap (the excess of imports over domestic exports) has averaged about 90 per cent of the value of imports, i.e. over the period 1950-1966 domestic exports have averaged no more than one tenth of the value of imports. The rapid, and roughly equal, rates of increase of both imports and exports have left the trade gap throughout 1950-1966 at its high level which has varied from a minimum of 86 per cent to a maximum of 94 per cent of imports during these years. Re-exports show hardly any increase during the fifties except for 1957 during which the Suez Canal was closed thus increasing momentarily the importance of Jordan in this respect. In the sixties,

TABLE I: Value of Commodity Imports and Exports and the Balance of Trade, 1950-1966

Year	Imports* JDm.	Domestic Exports‡ JDm.	Re-exports JDm.	Balance of Trade Deficit ø	
				JDm.	% of imports
1950	10.8	1.5	-	9.3	86
1951	15.7	1.0	0.4	14.7	94
1952	17.3	1.5	0.3	15.8	91
1953	18.4	1.9	0.2	16.5	90
1954	19.8	2.4	0.4	17.4	88
1955	27.1	2.6	0.2	24.5	90
1956	27.8	4.4	0.6	23.4	84
1957	30.5	4.3	1.2	26.2	86
1958	34.0	3.1	0.4	30.9	91
1959	40.3	3.1	0.3	37.2	92
1960	42.9	3.5	0.5	39.4	92
1961	41.9	4.3	1.0	37.6	90
1962	45.6	4.9	1.0	40.7	89
1963	50.9	5.5	1.0	45.4	89
1964	53.6	7.0	1.7	46.6	87
1965	56.1	7.8	2.2	48.3	86
1966	68.2	8.8	1.6	59.4	87

* c i f . Imports of concessionnaires and the larger part of military imports are excluded.

‡ f o b . Excluding concessionnaires' exports.

ø imports less domestic exports.

Source: Department of Statistics, Statistical Yearbook, relevant years.

in contrast, the value of re-exports stood at a relatively higher level reflecting the expansion of markets in the oil countries of the Arabian

Peninsula which has increased the possibilities of re-exports from Jordan. However, the re-export trade in Jordan remains relatively unimportant in relation to the other components of foreign trade (especially imports) to which we shall now turn our attention.

The importance of foreign trade in an economy can be appreciated by relating its level to the level of income in that country. In Table II we have related the value of both imports and exports (only domestic exports to which from now on we will be referring) to GDP in Jordan during 1954-1966 thus showing that commodity foreign trade has stood at an average level of 48.4 per cent of GDP during this period.

In considering this question we touch upon the subject of foreign trade proportions and factors affecting them in various countries. The level of foreign trade in relation to income varies widely from country to country: at one extreme we have a country like the U.S.A. with a commodity foreign trade proportion of 7.3 per cent of GNP, and at the other extreme we find countries like Trinidad and Tobago or Luxembourg with foreign trade proportions of 124 per cent and 157 per cent respectively. These ratios are taken from Professor Kuznets' study dealing with the level and structure of foreign trade in different countries in recent years in which the factors affecting foreign trade proportions in different countries are explicitly explored.[1] The

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1. Simon Kuznets, "Quantitative Aspects of the Economic Growth of Nations: IX. Level and Structure of Foreign Trade : Comparisons for recent years," Economic Development and Cultural Change, Vol. XIII, No. 1, Part II (October 1964), pp. 1-106.

TABLE II: Imports, Exports and Gross Domestic Product 1954-1966

Year	Imports JDm.	Exports* JDm.	GDP JDm.	Percentage of GDP		
				Imports	Exports	Total
1954	19.8	2.4	52.44	37.8	4.6	42.4
1955	27.1	2.6	47.89	56.6	5.4	62.0
1956	27.8	4.4	66.64	41.7	6.6	48.3
1957	30.5	4.3	68.57	44.5	6.3	50.8
1958	34.0	3.1	77.99	43.6	4.0	47.6
1959	40.3	3.1	85.17	47.3	3.6	50.9
1960	42.9	3.5	89.44	48.0	3.9	51.9
1961	41.9	4.3	110.87	37.8	3.9	41.7
1962	45.6	4.9	108.62	42.0	4.5	46.5
1963	50.9	5.5	117.67	43.3	4.7	47.0
1964	53.6	7.0	135.52	39.6	5.2	44.8
1965	56.1	7.8	150.95	37.2	5.2	42.4
1966	68.2	8.8	149.74	45.5	5.9	51.4
Average 1954-66:				43.5	4.9	48.4

* domestic exports only.

Source: Figures of imports and exports given in Table I above; figures of GDP already given in Chapter III.

size of a country (as measured by either total GNP or total population) was found by Professor Kuznets to mask the association between foreign trade proportions and per capita GNP: in general the smaller the country in size as defined the higher the foreign trade proportion. This stems from the familiar factors normally put forward in explaining this effect, such as the more limited concentration of natural

resources in smaller countries; the limits imposed upon the division of labour and the resultant absence of industries requiring a large market, and the possible effect of lower transport costs to and from the boundaries of smaller countries.[1] Once allowance is made for size, Professor Kuznets discerns a positive association between foreign trade proportions and per capita GNP. These two effects (size and per capita GNP) are coupled with such factors as complementarity to and distance from other economies to result in the different foreign trade proportions in different countries. Thus other than size and per capita income such factors as a high degree of specialization in a commodity entering world trade (e.g. Trinidad and Tobago, Malaya, Cuba) or political and/or geographical proximity to large trading partners (e.g. Luxembourg, Malta, Puerto Rico) serve to increase foreign trade proportions.

When we examine the foreign trade proportion in the Jordan economy in relation to other countries one important distinguishing feature emerges. While the foreign trade proportion in Jordan (48.4 per cent) falls in an intermediate position between the extreme proportions found in certain countries such as we have previously cited, what distinguishes the Jordan economy in this respect from other economies is the low level of exports in relation to imports. In other words while the combined proportion of imports and exports is

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1. Ibid., p. 15; also Charles P. Kindleberger, Foreign Trade and the National Economy (New Haven 1962), pp. 32-36.

neither on the low nor on the high side of the scale, the Jordan economy is distinguished in combining the particular imports and exports proportions it possesses. Data relating to 69 countries in Professor Kuznets' study reveal that Jordan has had the lowest ratio of exports to imports amongst these different countries in recent years.[1] These data relate not only to commodity but also to service foreign trade and show that in recent years Jordan has had a proportion of exports to imports of only 25.7 per cent. Only Korea has a comparable low ratio (27 per cent) followed by Libya (31.2 per cent), Viet Nam (36.7 per cent) and Israel (48 per cent). In Table III we saw that Jordan has had a ratio of commodity imports to GDP of 43.5 per cent during 1954-1966. Professor Kuznets' data (relating to 1957-1961 for imports and 1959 for GNP) give an imports ratio for Jordan of 47.3 per cent. Although this tends to be on the high side, there are many countries with higher ratios, e.g. Puerto Rico (65.3 per cent), Iceland (51.6 per cent), Cyprus (54.9 per cent), Surinam (60.8 per cent) and Libya with the extremely high ratio of 117.4 per cent.[2] However while the imports ratio in Jordan is not as such high, it is extremely high in comparison with the exports ratio as we have just mentioned. In fact this touches upon the question of the financing of imports which can be considered as an independent factor influencing the foreign trade proportions themselves. Professor Kuznets'

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1. Kuznets, op. cit., Appendix Table 8, pp. 104-106.
2. Ibid.

statement in the concluding parts of his just-cited study, that "there is clearly a connection between the importance of foreign financing /i.e. the flow of external transfers/ relative to gross national product and the foreign trade proportions"[1] could hardly be more relevant than in the case of Jordan. To be sure, Jordan has had one of the highest levels of foreign financing relative to income: Kuznets' data give Jordan the highest such ratio in a group of 69 countries where the proportion of combined net transfers and net deficit or surplus on current transactions to GNP is given as 34.4 per cent for Jordan, followed by Israel with a proportion of 22.5 per cent and Puerto Rico with a proportion of 19.2 per cent.[2] The U.N. World Economic Survey 1965 gives a level of foreign saving (i.e. payments less receipts for imports and exports of goods and services including factor income) of 21 per cent of GDP for Jordan during 1961-1963. This is exceeded only by the level given for Israel (23 per cent during the same period) and is followed by the level given for the Republic of Viet Nam (14 per cent during 1962-1964).[3]

The factor of foreign financing is in fact of great importance in our examination of both the proportions and trends of foreign trade in the Jordan economy during our period. While further considerations

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1. Ibid., p. 77.
2. Ibid., Appendix Table 8, pp. 104-106.
3. U.N. World Economic Survey 1965 (New York 1966), Part I, p. 17.

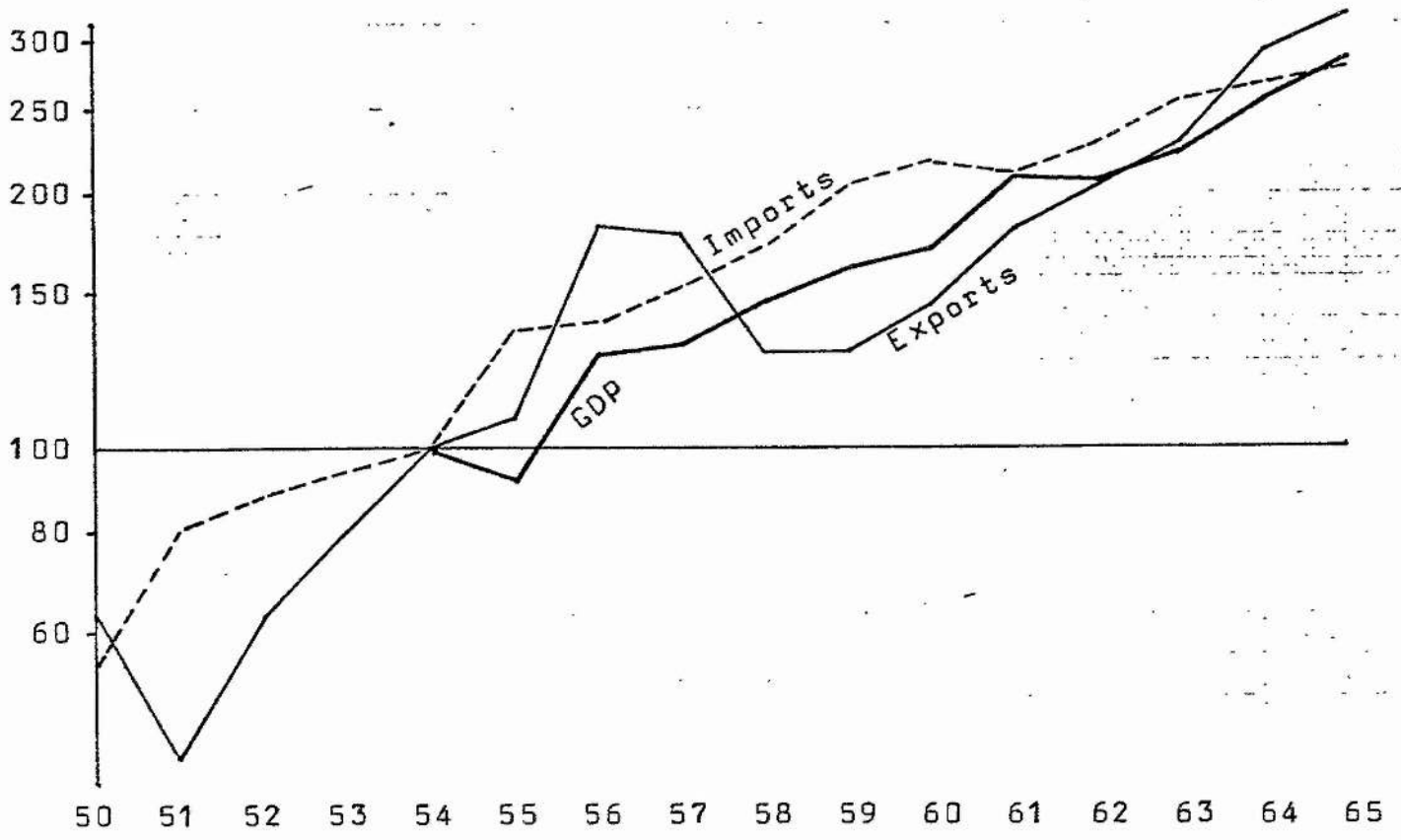
of this question is left for the latter part of the present chapter, dealing with the balance of payments, it ought to be kept in mind that a substantial and persistent foreign trade deficit was made possible through the inflow of foreign transfers. This enabled imports to play an especially important rôle in the Jordan economy and is reflected not only in the import proportion but also in trends in imports. This special rôle of imports has been already touched upon in various parts of our thesis. We shall now turn to examine in detail trends in imports during our period as well as trends in exports.

As we can see from Table III and Figure 1, both imports and exports have shown a rapid increase during 1950-1966. While GDP has been growing at the high rate of 10 per cent per annum during 1954-1966, both imports and exports roughly kept pace with this rapid growth; exports in fact showing a higher rate of growth as a result of their rapid expansion in the closing years of our period (see Table III).

Trends in imports in relation to GDP have been already touched upon in that part of our study dealing with monetary trends where we discerned a slight decline in the imports proportion (or what was called the imports income ratio) which was attributed to agricultural trends which show a rapid expansion of agricultural output in the closing years of our period. However we shall now proceed to examine in more detail these trends in imports and then go on to examine trends in exports.

Figure 1: Indexes of Imports, Exports (1950-1965) and GDP (1954-1965)

(1954=100)



Source: Table III.

TABLE III: Indices of Imports and Exports 1950-1966 and GDP 1954-1965 (1954 = 100)

Year	Value Index of Imports	Value Index of Exports	Index of GDP
1950	55	63	
1951	79	42	
1952	87	63	
1953	93	79	
1954	100	100	100
1955	137	108	91
1956	140	183	127
1957	154	179	131
1958	172	129	149
1959	204	129	162
1960	217	146	171
1961	212	179	211
1962	230	204	207
1963	257	229	224
1964	271	292	258
1965	283	325	288
Average Annual Rate of Growth 1954-1965:-			
	9.9%	11.3%	10.1%

Source: Data given in Tables I and II above.

(a) Imports. - We start our examination of trends in imports by looking at their composition according to general commodity groups during the period 1955-1966 for which details are available (Table IV). Although a relatively large part of imports is classified under

TABLE IV: Composition of Imports According to General Commodity Groups, 1955-1966

		1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	Average 1955-1966
Food, beverages and tobacco	JDm.	8.7	8.0	9.5	11.2	12.1	13.0	13.5	13.2	17.7	14.5	15.5	18.5	
	%	32.1	28.8	31.2	32.9	30.0	30.3	32.2	29.0	34.8	27.1	27.6	27.1	30.3
Non-edible raw materials (excl. fuels)	JDm.	1.0	0.9	1.1	1.5	2.2	2.0	1.6	2.0	2.2	2.3	2.5	3.0	
	%	3.7	3.2	3.6	4.4	5.5	4.7	3.8	4.4	4.3	4.3	4.5	4.4	4.2
Mineral fuels, lubricants & related mtls.	JDm.	2.0	2.4	2.7	2.7	2.9	3.3	2.5	2.6	2.7	2.8	3.2	3.4	
	%	7.4	8.6	8.9	7.9	7.2	7.7	6.0	5.7	5.3	5.2	5.7	5.0	6.7
Animal and vegetable oils & fats	JDm.	0.4	0.6	0.6	0.8	0.8	1.2	0.8	0.7	1.1	0.9	1.1	1.3	
	%	1.5	2.2	2.0	2.4	2.0	2.8	1.9	1.5	2.2	1.7	2.0	1.9	2.0
Chemicals	JDm.	0.9	0.8	1.1	1.3	1.5	1.8	2.3	2.4	2.7	2.7	3.6	4.4	
	%	3.3	2.9	3.6	3.8	3.7	4.2	5.5	5.3	5.3	5.0	6.4	6.5	4.6
Machinery & transport equipment	JDm.	4.2	4.5	4.2	5.6	7.2	6.8	6.7	8.4	7.5	10.9	10.4	12.3	
	%	15.5	16.2	13.8	16.5	17.9	15.9	16.0	18.4	14.7	20.3	18.5	18.0	16.8
Miscellaneous	JDm.	9.9	10.7	11.2	10.8	13.6	14.8	14.5	16.3	17.1	19.4	19.7	25.2	
	%	36.5	38.5	36.7	31.8	33.8	34.5	34.6	35.8	33.6	36.2	35.1	37.0	32.0
TOTAL:	JDm.	27.1	27.8	30.5	34.0	40.3	42.9	41.9	45.6	50.9	53.6	56.1	68.2	
	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

NOTE:- Figures might not add up because of rounding.

Source: Department of Statistics, Foreign Trade in the Jordan Economy 1950-1966 (Amman 1967), p. 46 (Arabic).

"miscellaneous", these data reveal that "food, beverages and tobacco" have been throughout 1955-1966 the largest single group of imports accounting for about 30 per cent of the value of total imports. Next in order of importance come "machinery and transport equipment" which have accounted for another 17 per cent of imports as an average over these years. This is followed by "mineral fuels, lubricants and related materials" (7 per cent) and "chemicals" (5 per cent), with "raw materials" accounting for another 4 per cent and "animal and vegetable oils" for 2 per cent (Table IV). While "food, beverages and tobacco" remain throughout these years the largest single group, we can nevertheless discern a decline in their relative importance, with "raw materials", "chemicals" and "machinery and equipment" in contrast showing a gain. These data provide us with a preliminary indication of trends in this respect and a fuller assessment can be obtained from examining the composition of imports according to their economic function or use.

Details of the classification of imports by economic use are available for the larger number of years between 1950 and 1966 as can be seen from Table V.

It can he seen that throughout these years consumer goods account for the largest part of imports followed by intermediate goods, with capital goods accounting for a relatively minor part. However, a closer look at the figures will reveal that consumer goods show a declining trend in their relative importance: during the sixties they

TABLE V: Classification of Imports by Economic Use 1950-1965

Year	Consumer Goods		Capital Goods		Intermediate Goods		Total JDm.
	JDm.	% of total	JDm.	% of total	JDm.	% of total	
1950	8.4	78	0.4	4	2.0	18	10.8
1951	12.5	80	0.5	3	2.7	17	15.7
1952	13.0	75	1.2	7	3.1	18	17.3
1955	20.6	76	2.6	10	3.9	14	27.1
1956	21.2	76	2.9	11	3.7	13	27.8
1958	24.7	73	4.2	12	5.1	15	34.0
1959	25.2	63	4.5	11	10.3	26	40.0
1961	27.6	66	4.4	10	9.9	24	41.9
1962	27.9	61	5.0	11	12.7	28	45.6
1963	32.9	65	3.1	6	14.9	29	50.9
1964	34.8	65	4.2	8	14.6	27	53.6
1965	34.6	62	3.9	7	17.6	31	56.1

Source: Foreign Trade in the Jordan Economy 1950-1966, pp. 22-23.

stand at about 60 per cent of total imports in contrast to the fifties when they accounted for 70 per cent and more of the total. Capital goods on the other hand show an increasing relative importance which is however followed from 1962 onwards by a decline. Intermediate goods show a roughly constant relative importance during the fifties when they vary between 18 per cent and 13 per cent of total imports: during the sixties however they exhibit a marked gain so that by 1965 they account for nearly one third of total imports (Table V). To be sure, although capital goods imports account for the smallest part of

total imports they show the highest rate of growth in their value which reaches a peak during 1958-1962 and then declines slightly so that in 1965 the value index of capital goods stood at 975 (1950=100). Consumer goods show the lowest rate of growth with their index standing at 412 in 1965 which is lower than the index of total imports (519) in that year (see Table VI and Figure 2). Intermediate goods show an especially rapid growth in the latter part of our period so that by 1963-1965 their index approaches that of capital goods.

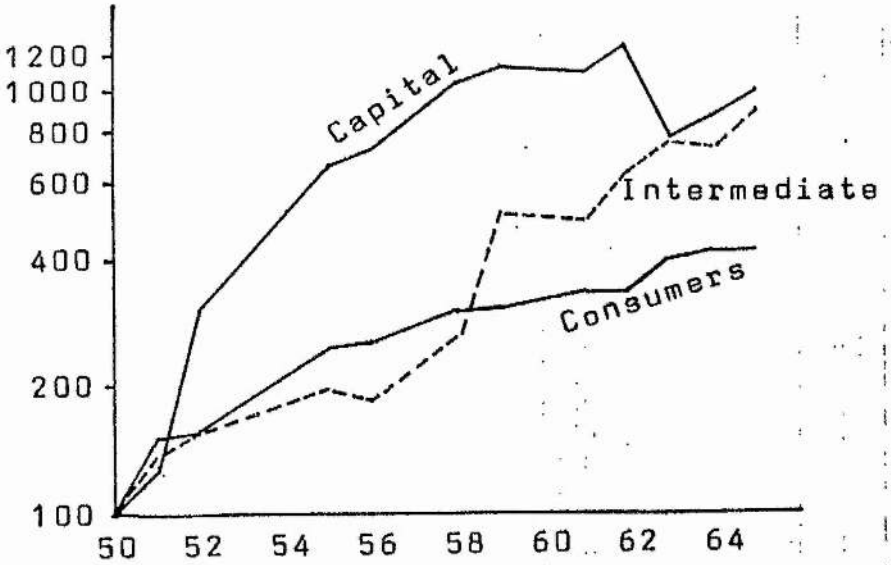
TABLE VI: Value Indices of Imports Classified by Economic Use 1950-1965

Year	Total Imports	Consumer Goods	Capital Goods	Intermediate Goods
1950	100	100	100	100
1951	145	149	125	135
1952	160	155	300	155
1955	251	245	650	195
1956	257	252	725	185
1958	315	294	1050	255
1959	373	300	1125	515
1961	388	326	1100	495
1962	422	332	1250	635
1963	471	394	775	750
1964	496	414	850	730
1965	519	412	975	880

Source: Table V.

Thus whereas we saw earlier on (Table III) that during 1954-1966 total imports have grown at a roughly equal rate to that of the overall

Figure 2: Value Indexes of Imports Classified by Economic Use, 1950-1965 (1950=100)



Source: Table VI.

growth in GDP, we here see that these imports have undergone wide changes in their composition. The different classes of imports according to their economic use show widely differing, and in certain cases changing, trends in their growth, and what we want to know now are the causes and significance, if any, of these trends.

(i) Consumer goods:

We start our examination of trends in the components of imports by looking at imports of consumer goods which have been, as we have already seen, the largest group of imports. Table VII gives us a breakdown of these imports into "unprocessed foodstuffs", "processed foodstuffs" and "others", the last category referring to a variety of manufactured consumer goods.

Trends in the various components of consumer goods can be readily assessed from Figure 3. In the early fifties and up to 1956 imports of unprocessed foodstuffs stood at a roughly stable level; this is however replaced by a period of rapid growth during 1956-1961, and then from 1961 onwards a decline. During the early period when these imports were at a roughly unchanging level, the imports of both processed foodstuffs and other consumer goods in contrast exhibited upward trends. However, once unprocessed foodstuffs imports start to rise from the mid-fifties onwards, the upward trend in the imports of other consumer goods levels off immediately and that of processed foodstuffs is reversed from 1958 so that by 1961 these latter imports fall back to near their 1956 level. Once imports of unprocessed

TABLE VII: Composition of Consumer Goods Imports, 1951-1965

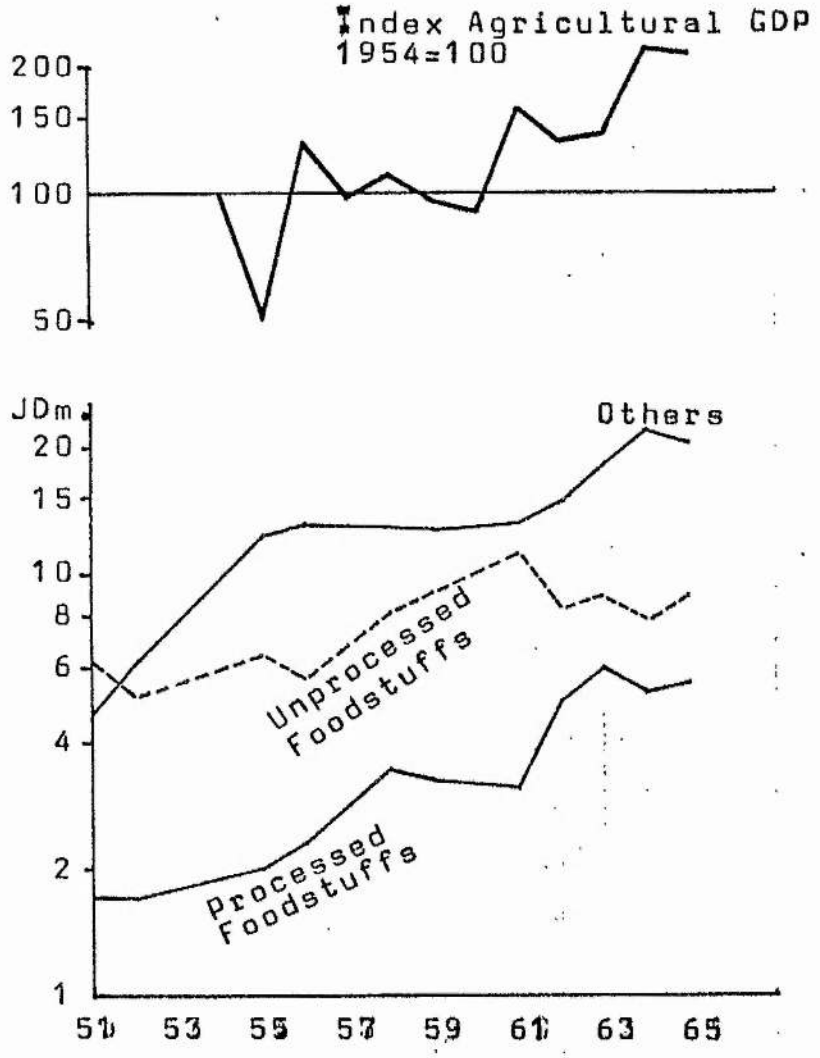
Year	Unprocessed Foodstuffs		Processed Foodstuffs		Total Foodstuffs		Others		Total JDm.
	JDm.	% of total	Jdm.	% of total	JDm.	% of total	JDm.	% of total	
1951	6.1	49	1.7	14	7.8	63	4.7	37	12.5
1952	5.1	39	1.7	13	6.8	52	6.2	48	13.0
1955	6.4	31	2.0	10	8.4	41	12.2	59	20.6
1956	5.6	26	2.3	11	7.9	37	13.3	63	21.2
1958	8.2	33	3.4	14	11.6	47	13.1	53	24.7
1959	9.2	37	3.2	13	12.4	50	12.8	50	25.2
1961	11.2	41	3.1	11	14.3	52	13.3	48	27.6
1962	8.2	29	4.9	18	13.1	47	14.8	53	27.9
1963	8.8	27	6.0	18	14.8	45	18.1	55	32.9
1964	7.8	23	5.3	15	13.1	38	21.7	62	34.8
1965	8.9	26	5.5	16	14.4	42	20.2	58	34.6

Source: Foreign Trade in the Jordan Economy, pp. 27-28.

foodstuffs enter their third period from 1961 onwards during which they show a declining trend, the imports of processed foodstuffs and of other consumer goods start once more to show a rising trend. In short, trends in the imports of processed foodstuffs and other consumer goods seem to move in a roughly opposite direction to those of unprocessed foodstuffs. What is the explanation of this?

Trends in the components of consumer goods imports have been the result of the interaction of two sets of factors: on the one hand trends in agricultural production, and the external financing of

Figure 3: Value (JDm.) of Components of Consumer Goods Imports (1951-1965), and Index of Agricultural GDP (1954-1965)



Source: Table VII.

imports on the other. As can be seen by reference to the index of agricultural GDP shown in Figure 3 the period between 1954 and 1959 was that during which agricultural production failed to grow as a result of successive droughts as we have already seen in that part of our study dealing with agriculture. The inability of domestic agriculture to meet the demand for food led to the rapid growth of imports of certain basic foodstuffs (e.g. wheat). And the ability to finance such higher levels of imports was greatly assisted by the inflow of foreign transfers which, as we shall see in examining the balance of payments later on, contributed substantially to the foreign exchange earnings of the country during this period. Now while repeated agricultural failures thus led to a rise in imports of certain basic foodstuffs it simultaneously affected the imports of the other two components of consumer goods: the reduction in personal incomes resulting from agricultural failures reduces the demand for consumer goods and especially those classified under the "other goods" category and to a lesser extent processed foodstuffs which tend to be "less basic" than the unprocessed foodstuffs. This reduced demand affects the imports of such goods especially when we remember that imports occupy an important position in the Jordan economy averaging as we have seen over 40 per cent in value of GDP.

However, from 1959 onwards when agricultural GDP shows a rapid expansion, the pressure on the imports of basic foodstuffs is reduced and in fact the value of unprocessed foodstuffs shows a decline from 1961 onwards (Table VII and Figure 3). While rising agricultural

production thus reduces the inflow of imports it simultaneously results in rising personal incomes and thus increases the demand for consumer goods. Accordingly processed foodstuffs and other consumer goods show a rising trend during the sixties. Nothing perhaps better illustrates this interconnection between agricultural production and imports than trends in the domestic production and imports of wheat during our period (Table VIII).

TABLE VIII: Local Production and Imports of Wheat 1950-1966 (000 tons)

Year	Local Production	Imports*
1950	106	7
1951	46	95
1952	225	63
1953	100	85
1954	233	46
1955	79	110
1956	243	68
1957	219	56
1958	66	151
1959	104	174
1960	44	206
1961	138	192
1962	112	109
1963	76	189
1964	295	124
1965	278	100
1966	101	177

* includes wheat equivalent of wheat flour imports assuming an average extraction rate of 80%.

Source: Department of Statistics, Statistical Yearbook, relevant years.

Although no details of changes in stocks of wheat are available, these figures serve to illustrate how wheat imports fluctuate in reflection of the level of domestic production of this important commodity: e.g. when the production of wheat was roughly halved from 106,000 tons in 1950 to 46,000 tons in 1951 wheat imports jumped from 7,000 to 95,000 tons in these years respectively. And it ought to be kept in mind that throughout our period (as we shall see in dealing with the balance of payments) the earnings of foreign exchange have been sufficient to finance such increases in imports. To be sure these sudden increases in imports in reality represent shifts from one category of imports to another: in years of drought unprocessed foodstuffs imports show an increase while imports of other consumer goods (as a result of the effect of agricultural failures on personal incomes) fail to increase as they normally do in years of plentiful crops. This reduces fluctuations in imports of total consumer goods which as we saw earlier on show a sustained upward trend throughout our period.

We have already examined (Chapter III, part II) the rôle of imports in the Jordan economy in relation to the growth of GDP and money supply. We discerned that increases in income and in money supply tended to "leak" readily in return for imports. Here we have just seen that as far as that component of imports classified as consumer goods is concerned, the leakage of income in return for such imports shifts from one year to the other between the different

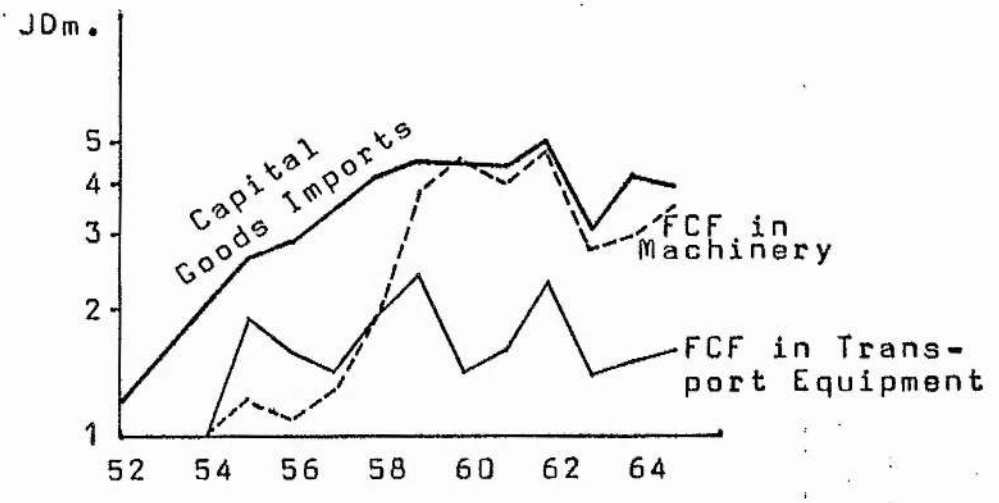
components of consumer goods imports in accordance with the pattern of growth of domestic production.

(ii.) Capital goods:

So far in our analysis of trends in imports we have been focusing our attention on consumer goods imports. We now turn to examine trends in capital goods imports. Earlier on, we have seen that imports of capital goods show a rise from very low levels in the early fifties to a peak during 1959-1962, after which they show a decline (Tables V and VI and Figure 2). An examination of the relevant data will reveal that these trends occurred in reflection of trends in the development of the economy and specifically trends in fixed capital formation during our period. Table IX gives the figures of capital goods imports during 1955-1965 which have been already presented, and in addition contains details of fixed capital formation in transport equipment and machinery during 1954-1965.

Fixed capital formation has already been examined in Chapter III; but what is of importance for our purposes here is to emphasize that the trends in capital formation which were examined would naturally be reflected in imports trends in an economy such as the Jordanian one with its heavy reliance on imports and especially those of such capital goods as transport equipment and machinery which are produced only in the more advanced economies. The peak of capital goods imports during 1959-1962 in fact coincides with the peak of expenditure on fixed capital formation (transport equipment and machinery) which

Figure 4: Capital Goods Imports and Fixed Capital Formation in Transport Equipment and Machinery, 1952-1965 (JDm.)



Source: Table IX.

TABLE IX: Capital Goods Imports and Fixed Capital Formation in Transport Equipment and Machinery, 1954-1965 (JD million)

Year	Fixed Capital Formation			Capital Goods Imports
	Transport Equipment	Machinery	Total*	
1954	0.9	0.7	1.6	-
1955	1.9	1.2	3.1	2.6
1956	1.6	1.1	2.7	2.9
1957	1.4	1.3	2.7	-
1958	1.9	1.9	3.8	4.2
1959	2.4	3.9	6.3	4.5
1960	1.4	4.6	6.0	-
1961	1.6	3.9	5.5	4.4
1962	2.3	4.8	7.1	5.0
1963	1.3	2.8	4.1	3.1
1964	1.5	3.0	4.5	4.2
1965	1.6	3.5	5.1	3.9

* total of transport equipment and machinery.

Source: Capital goods imports given in Table V above. Other data from R.S. Porter, Economic Trends in Jordan 1954-1959, British Middle East Office (Beirut 1961), p. 11; Department of Statistics, The National Accounts 1959-1966 (Amman, n.d.), p. 15.

occurred during that same period (see Figure 4). The factors behind this peak of fixed capital formation have been already examined in Chapter III when mention was made of the rapid expansion in manufacturing industry and investment in transport equipment that occurred towards the late fifties. Moreover, we have seen in that part of our

study dealing with manufacturing that in the late fifties and early sixties the main modern manufacturing industries in Jordan (such as petroleum refining, vegetable oil, tanning) were set up in relatively quick succession in addition to the expansion of capacity in such major industries as cement and phosphates and electric generation. These industries were all set up or expanded along "modern" lines thus requiring the importation of the major part of their fixed assets, and accordingly it is only to be expected that the imports of capital goods should show a parallel rise. Subsequently, and from 1962 onwards, the imports of such capital goods show a decline as the expansion of manufacturing industry proceeded within the already established industries (partly through fuller utilization and partly through expansion of capacity), plus the occasional setting up of a major new industry (e.g. papermaking and pharmaceuticals in the mid-sixties), a process which obviously does not require a high level of capital goods imports as the simultaneous setting up of several major industries as occurred in the late fifties and early sixties. And in conclusion, it ought to be remembered that the rapid expansion (one may even say "over-expansion") that occurred in the transport sector towards the late fifties and early sixties has helped to inflate further the peak which capital goods imports attained during this period. As we have already mentioned in dealing with the transport sector in Chapter III, a rapid expansion occurred in capacity within this sector which was however followed by a levelling off, and not until 1966 do we get yet another period of capacity expansion within this sector.

(iii) Intermediate goods:

One of the basic features of the Jordan economy is the absence of local raw materials in general so that manufacturing industry has to rely to a substantial extent on the imports of such materials from abroad. At the outset of our period and up to the late fifties imports of such intermediate goods varied between 13 per cent and 18 per cent in value of total imports (Table V). Manufacturing activity was during this earlier period both very limited and of a predominantly traditional character relying on whatever local raw materials were available. The reliance on Palestinian manufacturing industry under the Mandate, and the narrowness of the domestic market in Jordan prior to 1948 were the main factors which we had previously examined in connection with the extremely limited manufacturing activities at the outset of our period. The setting up of the modern import-substituting industries that occurred towards the late fifties resulted in many instances in a shift from the imports of manufactured products to the imports of the raw materials or intermediate goods that go to the manufacture of the finished goods in these import-substituting industries. Thus, to take one example, the imports of refined petroleum products from the Lebanon (parts of which are used for consumption) were replaced by imports of crude oil from Saudi Arabia after the establishment of the petroleum-refining industry in Jordan in 1961. Industries such as vegetable oil refining, cigarettes, papermaking and pharmaceuticals rely heavily upon imported inputs: the establishment and expansion of these and other manufacturing

industries from the late fifties onwards has accordingly led to a rapid expansion in the imports of intermediate goods which increased by more than threefold from JD 5.1 million in 1958 to JD 17.6 million in 1965 thus doubling their relative share to nearly one third of total imports (Table V). The resultant heavy dependence of the Jordan economy on imported inputs can be clearly seen from data in Table X which show that during 1963-1966 about 40 per cent of total intermediate inputs into the various sectors of the economy were imported.

TABLE X: Local and Imported Intermediate Inputs, 1963-1966
(at cost)*

	1963	1964	1965	1966
Local Inputs (JDm.)	18.7	24.4	25.7	27.7
Imported Inputs (JDm.)	14.9	14.7	17.6	20.3
Total Inputs (JDm.)	33.6	39.1	41.3	48.0
Ratio of Imported Inputs to Total Inputs	44%	38%	41%	42%

* i.e. excluding customs duties and other indirect taxes.

Source: Foreign Trade in the Jordan Economy 1950-1966, pp. 41, 43; the National Accounts 1959-1966, pp. 85-86.

While the economy as a whole relies upon imported intermediate inputs to this extent, the manufacturing sector in fact absorbs the larger part (about 60 per cent) of the total imported intermediate inputs (Table XI).

TABLE XI: Distribution of Imported Intermediate Inputs by Utilizing Sector, 1963-1966
(JD million)

	1963	1964	1965	1966
Agriculture	1.23	0.91	1.21	1.62
Mining	0.58	0.39	0.36	0.29
Manufacturing	9.03	9.53	10.49	12.24
Construction	1.44	1.55	1.96	2.81
Electricity and Water Supply	0.07	0.13	0.25	0.30
Transport	2.14	1.72	1.99	2.64
Trade	0.35	0.35	1.09	0.43
Services	0.11	0.12	0.30	-
Total:	14.95	14.70	17.65	20.33

Source: Same as Table X.

Here we can clearly see that the imports of intermediate goods are closely connected to activity in the manufacturing sector. To be sure the rapid growth of intermediate goods imports which occurred from the late fifties onwards is a true reflection of the changing structure of the Jordan economy during this period. Trends in this respect have undoubtedly had an influence on trends in the imports of consumer goods in so far as the expansion of import-substituting industry and the resultant increase in imported intermediate goods have reduced the reliance on imported manufactured consumer goods. However this latter category of imports, as we have already seen, still

managed to show a rapid growth during the sixties thus indicating the relatively limited extent to which import substitution has occurred.

So far in our analysis of imports we have been examining trends in the various categories of imports and factors behind these trends. Here and in other parts of the thesis emphasis has been placed on the rôle of imports as an equilibrating factor whereby fluctuations in them were considered to reflect quite closely changes in domestic aggregate supply and demand. However one important aspect that should be taken into consideration in this connection is the possible distorting effect of movements in the prices of imports. A first indication of price stability in this respect has been in fact already examined. We saw in Chapter III that the wholesale price index in Jordan shows remarkable stability during our period. If any wide fluctuations occurred in the prices of imports then undoubtedly such fluctuations would have been reflected in the wholesale price index, containing as it does heavy weights for such items as cereals, foodstuffs, fuels, etc., which represent on average a sizeable part of total imports. This preliminary indication of stability in import prices is further confirmed by a price index of imports covering the period 1957-1966 (Table XII).

This price index of imports shows remarkable stability. Only in the first two years (1957 and 1958) does this index stand at a somewhat high level: upon closer examination this is found to be mainly caused by the high prices of textiles (which are given a relative

TABLE XII: Imports Price Index,* 1957-1966 (1962 = 100)

Item	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
All items	125	120	106	103	103	100	101	101	101	104
Animals and animal products:										
for foodstuffs	135	225	127	121	101	100	100	97	100	109
other than "	100	100	100	100	103	100	95	91	83	144
Vegetables	87	87	97	90	96	100	81	93	90	100
Fruits	85	91	86	88	98	100	98	90	82	91
Coffee, tea, spices	136	112	112	115	119	100	98	101	106	107
Cereals	99	96	99	89	99	100	101	106	101	108
Edible oils	101	101	101	101	119	100	89	86	127	109
Prepared foodstuffs	183	131	119	122	109	100	142	144	126	109
Other agricultural products (except tobacco)	123	143	126	96	85	100	110	101	90	100
Beverages	93	89	87	88	88	100	96	94	97	100
Tobacco & cigarettes	90	98	96	97	92	100	94	93	90	101
Fuels & lubricants	134	131	127	98	100	100	101	101	102	103
Fertilizers & insecticides	124	127	117	106	97	100	95	101	135	122
Wood	103	113	100	101	108	100	97	95	101	99
Rubber tyres	98	102	98	108	99	100	110	103	102	100
Non-metallic products	121	117	117	110	104	100	95	105	103	92
Textiles	178	113	93	96	97	100	96	98	97	97
Clothing & footwear	114	110	106	106	97	100	96	87	86	87
Paper	106	107	133	98	96	100	122	116	122	130
Transport equipment	109	104	104	109	115	100	105	100	94	109
Perfumes and personal care products	91	103	96	95	99	100	103	107	114	127

Iron/....

(Table XII, continued)

Item	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Iron & metallic products	129	115	115	119	112	100	104	109	114	106
Electrical appliances & products	100	100	100	132	112	100	120	110	120	115
Chemicals	100	79	85	98	80	100	92	88	80	101
Others	126	126	109	109	98	100	99	97	103	107

* index based on c i f prices.

Source: Privately obtained from the Department of Statistics from a study under preparation.

weight of 14.5 per cent) and animals and animal products for foodstuffs (which are given a weight of 10 per cent). Other than during 1957 and 1958 the average index for all items varied between a maximum of 106 in 1959 and a minimum of 101 in 1963-1965 (1962 = 100). This clearly indicates that the fluctuations in the value of imports which we have examined were largely true reflections of changes in quantities and not merely changes in import prices or transport and other costs such as insurance (the price index of Table XII is based on c i f prices).

Before proceeding to examine exports during our period, we shall briefly examine the sources of imports into Jordan. Throughout our period Western Europe has been the largest source of imports followed by the Arab countries (mainly the Asiatic ones) and North America (Table XIII). A variety of manufactured goods plus certain raw materials (e.g. iron, timber) are imported from Western Europe, the

TABLE XIII: Imports According to Geographic Area, 1955-1966

(JD 000)

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Arab Countries - Total	5319	6157	7091	7208	6918	8591	7163	7767	11381	9547	10495	13488
- (a) Asian Arab Countries..	4529	5244	5886	6051	5829	7500	5949	6705	9720	7688	8997	11460
- (b) African " " ..	790	913	1205	1157	1089	1091	1214	1062	1661	1859	1498	2028
Asia (excl. Arab countries)..	1725	1536	2753	2951	4379	3537	4958	5694	5315	5628	6912	8349
Africa (" " ")..	110	144	148	89	99	159	435	459	418	335	590	740
Western Europe.....	14351	15396	14798	16022	20781	21748	18272	20931	21001	20340	22366	26188
Eastern Europe.....	1200	1769	2237	2723	2958	2515	2780	3098	3458	5509	5661	5795
North America.....	2822	1856	2298	3455	4010	5414	7287	6066	7082	11250	8497	12148
South America.....	219	239	379	291	321	321	428	349	222	351	353	523
Others.....	1313	722	782	1290	862	650	587	1265	2050	598	1178	981
Total:	27059	27819	30486	34029	40328	42935	41910	45629	50927	53558	56052	68212
(Percentages)												
Arab Countries - Total	19.7	22.1	23.3	21.2	17.2	20.0	17.1	17.0	22.4	17.8	18.7	19.8
- (a) Asian Arab Countries..	16.7	18.8	19.3	17.8	14.5	17.5	14.2	14.7	19.1	4.4	16.1	16.8
- (b) African " " ..	3.0	3.3	4.0	3.5	2.7	2.5	2.9	2.3	3.3	3.4	2.6	3.0
Asia (excl. Arab countries)..	6.4	5.5	9.0	8.7	10.9	8.2	11.8	12.5	10.4	10.5	12.3	12.2
Africa (" " ")..	0.4	0.5	0.5	0.3	0.2	0.4	1.0	1.0	0.8	0.6	1.1	1.1
Western Europe.....	53.0	55.3	48.6	47.1	51.5	50.7	43.6	45.8	41.3	38.0	39.9	38.4
Eastern Europe.....	4.4	6.4	7.3	8.0	7.3	5.9	6.6	6.8	6.8	10.3	10.1	8.5
North America.....	10.4	6.7	7.5	10.1	9.9	12.6	17.4	13.3	13.9	21.0	15.2	17.8
South America.....	0.8	0.9	1.2	0.9	0.8	0.7	1.0	0.8	0.4	0.7	0.6	0.8
Others.....	4.9	2.6	2.6	3.7	2.2	1.5	1.5	2.8	4.0	1.1	2.1	1.4
Total:	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Foreign Trade in the Jordan Economy 1950-1966, p. 53.

main single sources being the United Kingdom and West Germany. However North America increased its share from about 8 per cent in 1955-1956 to about 16 per cent in 1965-1966 of all imports mainly as a result of increased imports from the U.S.A. In fact at the outset of our period Western Europe and especially the U.K. were the traditional overseas sources of imports as a result of the close ties that evolved under the Mandate. However as our period proceeded, and as closer ties evolved with the U.S.A., imports from this latter source increased rapidly so that by the end of our period it became the largest single source: imports from the U.K. stood at JD 3 million in 1952 out of a total import bill of JD17.3 million and increased to JD8.1 million by 1966; imports from the U.S.A. stood at JD1.2 million in 1952 but increased to the much higher level of JD12 million by 1966.[1] An increased part of manufactured goods imports (both consumer durables and capital goods) came to be imported from the U.S.A. during our period instead of the near complete reliance on Western Europe for the supply of such products. As far as imports from the Arab countries are concerned these have stood at an average of about 20 per cent of total imports during 1955-1966 (Table XIII). Syria and Lebanon are the largest sources of imports amongst the Arab countries, supplying Jordan mainly with foodstuffs plus some manufactured items (e.g. textiles from Syria and re-exports from Lebanon). Other than foodstuffs and certain manufactured goods the Arab countries supply Jordan with crude oil which comes from Saudi Arabia. The much more distant sources of supply in Western Europe

1. Foreign Trade in the Jordan Economy 1950-1966, p. 56.

and North America in fact provide Jordan with a larger part of its imports than do the neighbouring Arab countries. This reflects the generally underdeveloped nature of the neighbouring countries' economies which together with Jordan have to rely heavily on imports from the developed countries. This serves to illustrate the familiar fact that not only does trade amongst the advanced countries account for the larger part of total international trade, but the larger part of the foreign trade of the developing countries themselves is carried out with the advanced countries.

(b) Exports. - At the outset of this part of our study we saw that throughout 1950-1966 there was a persistent and large foreign trade deficit with exports averaging in value only about 11 per cent of imports (Table I). Imports play a much more important rôle relatively in the Jordan economy than exports; while the proportion of the former to GDP stood at an average of over 40 per cent during 1954-1966, the latter averaged only about 5 per cent (Table II). However, in spite of this seemingly minor rôle of imports they do in fact show a very rapid growth (11.3 per cent per annum), which exceeds both the rate of growth of imports (9.9 per cent) and GDP (10 per cent) during 1954-1966 (Table III). We shall now turn to examine factors behind trends in exports.

As can be readily seen by reference to Figure 1, exports initially show a momentary decline during 1951, which is however followed by a

sustained upward trend up to 1956. After 1956 however they decline and not until 1961 do they regain their 1956 level. However from 1961 onwards they show a very high rate of growth which exceeds both that of imports and GDP (Table I and figure 1). An examination of the details of exports reveals that two main factors lie behind these changes in exports. On the one hand the fluctuations that occurred in the value of exports during the fifties can be associated with the traditional place of exports in the Jordan economy, viz., the export of surplus agricultural products in years of good crops, with very little else. Accordingly, fluctuations in agricultural production were vividly mirrored in fluctuations in total exports. On the other hand the rapid rise in exports in the latter part of the period can be associated with firstly the emergence and rapid expansion of non-agricultural exports, and secondly with developments in the agricultural sector which both expanded the output of certain crops (e.g. vegetables) and simultaneously reduced their dependence on rainfall. An examination of the composition of exports during these years (Table XIV) will readily reveal these factors.

As can be seen from these figures, at the outset of our period there were hardly any exports other than agricultural products: exports of phosphates were only JD 25,000 in 1952 and JD 51,000 in 1954, and exports of such manufactured items as cigarettes and batteries (which later on became important) were completely non-existent in the early fifties. Years such as 1954 and 1956 witnessed a high level of

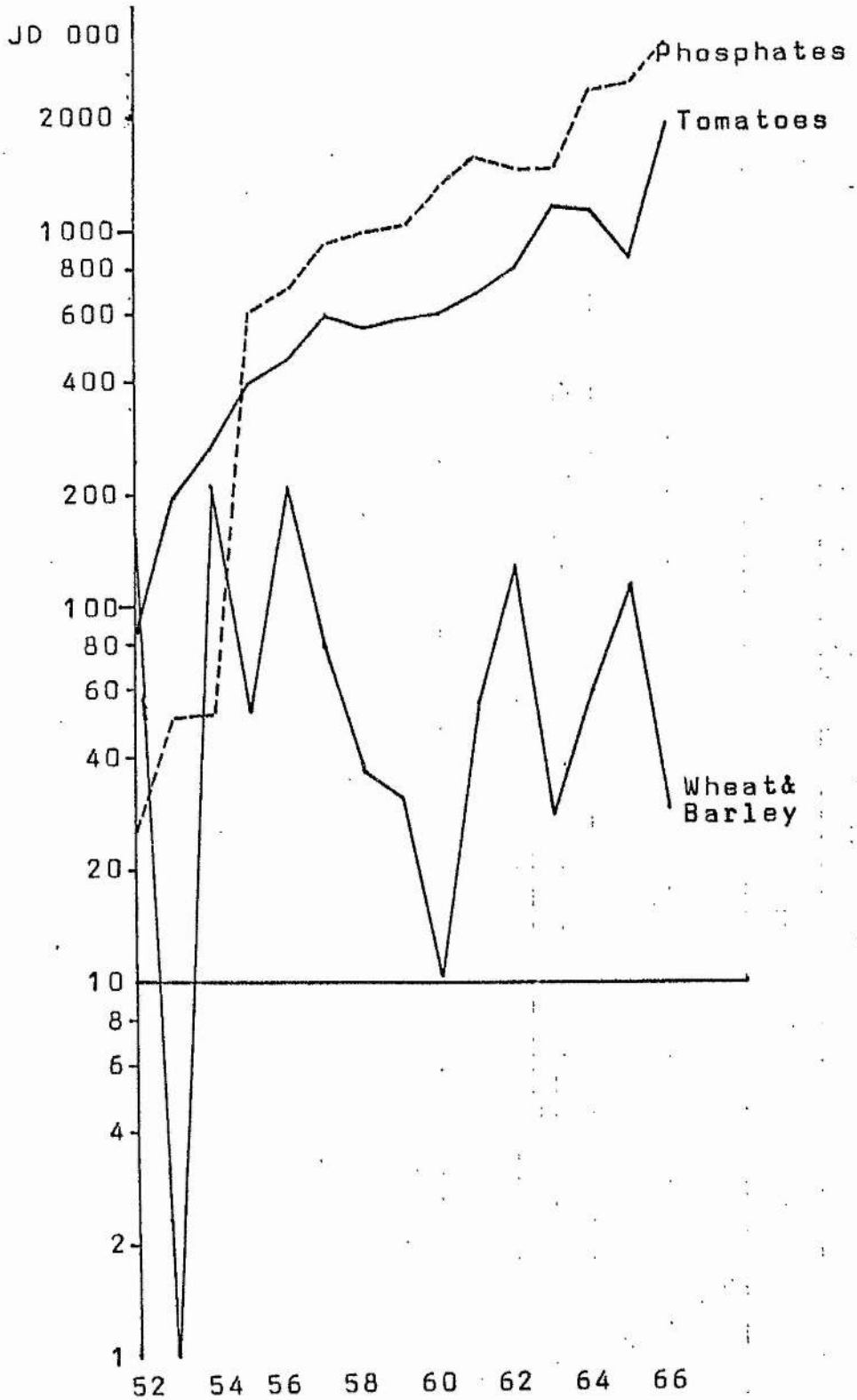
TABLE XIV: Value of Principal Exports, 1952-1966 (JD 000)

	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Phosphates	25	50	51	602	691	916	978	1024	1305	1554	1456	1455	2363	2430	3127
Tomatoes	85	194	266	389	450	583	556	580	595	674	794	1138	1132	830	1899
Melons	(a)	(a)	157	153	309	407	241	233	234	307	356	424	426	512	199
Lentils	52	90	121	39	239	271	27	-	2	26	277	61	397	742	60
Other vegetables	(a)	(a)	(a)	(a)	(a)	(a)	441	335	371	355	496	443	401	480	687
Wheat	17	1	63	-	121	38	31	31	13	16	100	22	4	30	19
Wheat flour	49	3	8	9	41	125	103	159	101	77	84	82	66	71	71
Barley	136	-	145	52	85	40	6	-	-	39	25	6	55	81	10
Sesame	35	122	142	42	104	74	23	-	63	231	132	20	48	20	48
Bananas	63	93	60	153	214	74	133	79	75	69	108	106	56	201	285
Olive oil	190	627	547	347	823	493	56	32	14	46	56	340	84	58	63
Raw hides	71	66	40	79	103	88	103	87	122	61	136	183	146	169	224
Processed feeding-stuffs	-	-	-	-	-	-	-	-	-	-	-	-	26	76	83
Cigarettes	-	-	1	-	47	65	31	36	53	35	35	234	592	415	323
Asphalt	-	-	-	-	-	-	-	-	-	-	-	90	53	101	117
Batteries	-	-	-	-	-	-	-	-	-	14	45	54	28	123	214
Others	557	654	833	754	1152	1128	410	502	533	748	829	865	1135	1413	1330
Total:	1280	1900	2434	2619	4379	4302	3139	3098	3481	4252	4929	5523	7012	7752	8959

(a) included with "others". Source: Foreign Trade in the Jordan Economy, 1950-1966; Statistical Yearbook, relevant years.

production in the agricultural sector as a result of plentiful rain, and accordingly the exports of such items as tomatoes, wheat, barley and olive oil were at a relatively high level in these periods. At the same time the exports of phosphates were rapidly expanded between 1954 and 1956 and consequently we get a swift growth in the value of exports in the early fifties and up to 1956. However from 1957 onwards successive droughts occurred which, as we have already seen in that part of our study dealing with agriculture, had an extremely adverse effect on agricultural production and therefore reduced agricultural exports. In fact, as can be seen from Figure 5, the fall in exports occurred mainly in such agricultural crops as wheat and barley the production of which is almost entirely dependent on rain. During this period agricultural developments were being implemented through expanding the irrigated area and the exports of such products as tomatoes, melons and other vegetables and fruits were adversely affected by these droughts as well. To be sure, the effect on these latter items was less pronounced than on the entirely rain-fed crops such as wheat and barley, and while the exports of the latter show a steep decline between 1956 and 1960, the exports of tomatoes, for example, only fail to register an expansion (Figure 5). Thus in spite of the continued expansion of phosphates exports, total exports show a decline in their value during this period (1957-1960). However, in the sixties trends in the agricultural sector show a marked improvement through the increased

Figure 5: Value of Exports of Phosphates, Tomatoes and Wheat & Barley, 1952-1966 (JD 000)



Source: Table XIV.

production of rain-fed crops, as a result of more plentiful rain, and the continuation of expansion in the output of the fruits and vegetables sub-sectors through irrigation. Simultaneously, the exports of phosphates continue to expand and new exports such as batteries, asphalt, cigarettes emerge for the first time in the early sixties (in the fifties cigarettes were exported to a very limited extent only: see Table XIV). The resultant effect of these trends in the various categories of exports was the very swift expansion in the value of exports which occurred in the sixties and which we have previously noticed.

Trends in exports during our period reflect in fact the changes that occurred in the structure of the Jordan economy. The expansion of production in the agricultural sector through the development of irrigation firstly expanded the value of agricultural exports and secondly changed their character from being largely surpluses resulting from occasional plentiful rain to being products actually produced for the export markets, e.g. tomatoes. In fact by the end of our period tomatoes accounted for about one fifth of the value of total exports. In addition the expansion of mining (mostly phosphates) and manufacturing introduced a further stable element into Jordanian exports: by the end of our period these latter exports (i.e. mining and manufacturing) in fact accounted for about one half of the value of total exports (Table XV), with manufactured products alone accounting for about 13 per cent. These exports have in fact emerged from extremely

low levels in the earlier part of our period when manufacturing activities in the Jordan economy were extremely limited.

TABLE XV: Exports Classified by Industrial Origin, 1958-1962
(JD 000)

Products	1958	1959	1960	1961	1962	1963	1964	1965	1966
Agricultural....	1752	1613	1736	2109	2769	2778	3125	3771	3992
of which tomatoes.....	556	580	595	674	794	1138	1132	830	1899
Manufactured foodstuffs.....	223	228	193	237	320	589	395	452	483
Mining Products	1028	1051	1346	1660	1568	1537	2470	2547	3258
of which phosphates....	978	1024	1305	1554	1456	1455	2363	2430	3127
Other manufactured.....	136	206	206	246	272	618	1022	982	1026
Total:	3139	3098	3481	4252	4929	5523	7012	7752	8759
	(Percentages)								
Agricultural....	55.8	52.1	49.9	49.6	56.2	50.3	44.6	48.6	45.6
of which tomatoes.....	17.7	18.7	17.1	15.9	16.1	20.6	16.1	10.7	21.7
Manufactured foodstuffs.....	7.1	7.4	5.5	5.6	6.5	10.7	5.6	5.8	5.5
Mining Products	32.8	33.9	38.7	39.0	31.8	27.8	35.2	32.9	37.2
of which phosphates....	31.2	33.1	37.5	36.6	29.5	26.3	33.7	31.4	35.7
Other manufactured.....	4.3	6.6	5.9	5.8	5.5	11.2	14.6	12.7	11.7
Total:	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Foreign Trade in the Jordan Economy 1950-1966, pp. 61, 64.

As we can see from Table XV, in spite of the rapid growth of certain agricultural exports, a decline occurred in the relative importance of agricultural products in total exports during 1958-1966: agricultural exports' (both raw and manufactured) contribution fell from 59 per cent of total exports in 1958-1960 to 53 per cent in 1964-1966. Mining products maintained an unchanged share of 35 per cent as between these two periods while exports of manufactured products more than doubled their share from 6 per cent during 1958-1960 to 13 per cent during 1964-1966.

As far as the direction of exports is concerned this contrasts sharply with that of imports. While, as we have already seen, Western Europe and North America are the main sources of imports, Jordan's exports go mainly to the neighbouring Arab countries (60-70 per cent).[1] Exports directed to non-Arab countries largely consist of phosphates which are exported to such countries as Italy, Yugoslavia and India. The neighbouring countries represent the traditional market for Jordan's exports of agricultural products, and the growth of demand in the oil countries (e.g. Kuwait) has been an especially important factor in the growth of such exports as vegetables and fruits which fetch extremely favourable prices in those countries which can be considered as hardly having a domestic agricultural sector but which have experienced an astronomical rise in incomes resulting from oil exports. The extremely favourable geographic location of Jordan in the middle of the Arab world is in

1. Foreign Trade in the Jordan Economy 1950-1966, p. 56.

fact one of the main factors that can be exploited in setting up those types of industries for which transport costs are an important factor in determining competitiveness. To take one actual example, the papermaking industry recently established in Jordan (commenced production in 1966), has been exporting a larger proportion of its production to the neighbouring countries (Iraq and Syria) than it sells domestically. Savings on transport costs through the favourable location of this industry relative to the neighbouring markets is in fact a decisive element in determining its ability to compete in these export markets.[1]

(2) The Balance of Payments

(a) Current Account. - Details of the balance of payments on current account during 1954-1966 are shown in Table XVI together with definitions and explanations of the various items. During these years total current receipts increased by slightly over threefold from JD 20.5 million in 1954 to JD 64.3 million in 1966 while total current payments nearly quadrupled from JD 20 million to JD 77.1 million. On the receipts side, transfers (both to households and to the

1. Transport costs (sea freight from Europe plus inland transport) of paper to Iraq (Baghdad) and Syria (Damascus) amount on average to about 17% and 10% respectively of the price of this commodity. Transport costs from Jordan to both of these markets amount in contrast to no more than 5% and 2.6% respectively.

government) represent the larger single item with its share in total current receipts averaging about 45 per cent during this period (Table XVII). This is followed in order of importance by receipts from services and factor income (22 per cent and 21 per cent respectively), with exports of goods contributing only an average of 13 per cent. Comparison with other countries reveals that the structure of Jordan's current receipts differs widely in respect of the relatively low share of exports of goods on the one hand and the relatively high share of factor income and transfers on the other.

Data given in Professor Kuznets' study of the level and structure of foreign trade in 45 countries in recent years reveal that on average exports of commodities contributed about 72 per cent of the total international receipts of those countries.[1] This share of commodity exports varied from a maximum of 77 per cent to a minimum of 62 per cent amongst the various groups of countries (grouped by per capita GNP), and detailed data reveal that only Korea and Malta had shares of commodity exports (10.9 per cent and 11.4 per cent respectively) in total receipts comparable to that which we found for Jordan.[2] The low proportion of exports in the Jordan economy has already been commented upon, and the low share of commodity exports in total receipts in Jordan contrasts with extremely high shares of receipts from transfers and factor income. The high share of transfers

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1. Kuznets, op. cit., pp. 4-5.
2. Ibid., Appendix Table 2, pp. 82-83.

		1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
1. (a)	Exports and re-exports (f o b)	3.10	3.60	5.20	5.50	3.50	3.41	3.95	5.27	5.92	6.56	8.73	9.91	10.40
(b)	Travel	2.20	2.50	1.50	1.20	1.20	2.85	3.23	4.34	5.05	6.00	8.02	9.81	11.26
(c)	Other services	0.08	1.20	2.70	4.00	5.20	5.53	5.61	7.34	8.11	7.70	7.82	8.82	10.40
	Total Exports of Goods and Services	6.10	7.30	9.40	10.70	9.90	11.79	12.79	16.95	19.08	20.26	24.57	28.54	32.06
2. (a)	Remittances from Jordanians abroad	3.70	3.90	4.90	4.90	3.80	4.61	6.23	5.24	6.20	6.17	9.28	9.14	10.57
(b)	Interest and dividends	1.30	2.80	2.40	2.90	2.00	0.67	0.62	1.19	1.37	1.11	1.71	2.58	3.64
(c)	Oil companies						0.50	0.64	0.77	4.66	1.51	1.13	1.73	1.42
	Total Factor Income	5.00	6.70	7.30	7.80	5.80	5.78	7.49	7.20	12.23	8.79	12.12	13.45	15.63
3. (a)	Current transfers to households	4.20	4.20	4.20	4.20	4.20	4.36	4.38	3.89	3.61	4.25	3.86	4.29	4.21
(b)	Current transfers to government	5.20	5.90	7.30	10.20	17.10	16.69	16.52	16.52	15.39	13.28	14.51	11.83	12.37
(c)	Budget support loan from abroad	-	-	-	-	-	-	-	-	-	-	5.00	-	-
	Total Current Transfers from Rest of World	9.40	10.10	11.50	14.40	21.30	21.05	20.90	20.41	19.00	17.53	23.37	16.12	16.58
TOTAL CURRENT RECEIPTS		20.50	24.10	28.20	32.90	37.00	38.62	41.18	44.56	50.31	46.58	60.06	58.11	64.27
4. (a)	Imports (c i f)	18.60	25.30	24.60	29.80	34.00	40.18	42.80	41.74	44.92	53.63	49.38	55.77	67.26
(b)	Travel	0.90	1.10	0.90	1.70	1.60	1.93	2.22	2.44	3.42	3.20	3.63	4.29	5.23
(c)	Other services	0.30	0.40	0.70	0.90	1.10	1.26	2.03	2.43	3.46	4.23	3.64	3.49	4.11
	Total Imports of Goods and Services	19.80	26.80	26.20	32.40	36.70	43.37	47.05	46.61	51.80	61.06	56.65	63.55	76.60
5.	Total Interest and Dividends	0.20	0.30	0.50	0.20	0.10	0.18	0.10	0.20	0.30	0.23	0.45	0.52	0.48
6.	Current Transfers from Government to Rest of World	-	-	-	-	-	0.06	0.07	0.08	0.06	0.06	0.05	0.05	0.05
TOTAL CURRENT PAYMENTS		20.00	27.10	26.70	32.60	36.80	43.61	47.22	46.89	52.16	61.35	57.15	64.12	77.13
Surplus of nation on current account		0.50	-3.00	1.50	0.30	0.20	-4.99	-6.04	-2.33	-1.85	-14.77	2.91	-6.01	-12.86

NOTES:-

1(a). Figures differ slightly from those given in Statistical Yearbook as a result of differences in classification.

1(b). Expenditure of foreign visitors to Jordan.

1(c). Includes foreign diplomatic missions' expenditures; receipts from insurance and freight; local expenditures of UNRWA, charitable institutions and U.N. agencies.

2(a). Remittances from Jordanians temporarily abroad (i.e. not emigrants). Emigrants (i.e. Jordanians permanently resident abroad) transfers are included under 3(a). Figures for 1954-1958 are given in the source (R.S. Porter) under item (3.a) and we have here estimated them by subtracting an estimate for current transfers to households arrived at by taking its average/.....

TABLE XVI: Balance of Payments Current Account, 1954-1966

(JD million)

Notes to Table XVI (continued)

average value for 1959-1961, as these latter transfers have been roughly constant throughout the period.

2(b). Interest on bank balances abroad, and profits of the Central bank remitted to Jordan.

2(c). Payments by foreign oil companies in respect of wayleaves and prospecting rights. The figure for 1962 is unusually high as it includes an exceptional payment of JD 3.68 million for previous years' arrears.

3(a). Includes remittances from Jordanians permanently resident abroad; pensions received by Jordanians previously employed by the Palestine Government under the Mandate; the value of relief goods distributed by UNRWA and various charitable institutions; the value of foodstuffs received from the U.S.A. under PL480 Title 3 agreement for free distribution to needy people, and under PL480 Title 2 agreement for free distribution and not for sale.

3(b). Budget support received from the U.S.A. and British governments.

3(c). Kuwaiti loan received by the government for the specific purpose of supporting the budget.

4(a). Figures differ slightly from those given in Statistical Yearbooks as a result of differences in classification.

4(b). Estimated expenditure of Jordanians travelling abroad.

4(c). Payments abroad by the Jordan government for non-commercial purposes including expenditures of Jordanian diplomatic missions.

5. Remittances of profits by foreign companies operating in Jordan, and of dividends of non-resident shareholders in Jordanian companies.

6. Contributions to international bodies, and to foreign governments.

Source: R.S. Porter, op. cit., p. 12; The National Accounts 1959-1966, pp. 21 and 68-72.

TABLE XVII: Structure of Current International Receipts, 1954-1966
(percentage of total)

Year	Commodity Exports	Service Exports		Factor Income	Transfers	
		Travel	Other		to Households	to Government
1954	15.1	10.7	3.9	24.4	20.5	25.4
1955	14.9	10.4	5.0	27.8	17.4	24.5
1956	18.4	5.3	9.6	25.9	14.9	25.9
1957	16.7	3.6	12.2	23.7	12.8	31.0
1958	9.5	3.3	14.1	15.7	11.4	46.0
1959	8.8	7.4	14.3	15.0	11.3	43.2
1960	9.6	7.9	13.6	18.2	10.6	40.1
1961	11.8	9.7	16.5	16.2	8.7	37.1
1962	11.8	10.0	16.1	24.3	7.2	30.6
1963	14.1	12.9	16.5	18.9	9.1	28.5
1964	14.5	13.4	13.0	20.2	6.4	32.5*
1965	17.0	16.9	15.2	23.1	7.4	20.4
1966	16.2	17.5	16.2	24.3	6.6	19.2
Average 1954-66:	13.0	9.9	12.3	21.4	11.1	34.2

* includes "budget support loan from abroad".

Source: Based on data given in Table XVI.

shown for Jordan in Table XVII is exceeded only by that for Korea (63.6 per cent) and compares with an average share of 6.3 per cent for the 45 countries examined in Professor Kuznets' study. Similarly, factor income shows an unusually high share (21.4 per cent) in Jordan's total receipts which is approached only by the share of this type of receipts given for the U.K. (18.9 per cent) and compares with

an average of 4.1 per cent in the group of 45 countries. The share of services exports found for Jordan (22.2 per cent) is only slightly above the average given for the 45 countries (17.7 per cent). While these international comparisons serve to indicate how the structure of Jordan's international receipts differs from those found in other countries at various stages of development (as measured by per capita GNP), we want now to see the factors behind these differences.

Firstly, transfers show an unusually high share as a result of the relatively substantial amounts of grant-aid received by the government to finance its current expenditures in the form of budget support from the U.S.A. and the U.K. In addition to these official current transfers, the private sector receives certain current receipts from a variety of sources: relief goods distributed on the Palestinian refugees by UNRWA (United Nations Rehabilitation and Works Agency) and various charitable institutions; foodstuffs received from the U.S.A. under PL480 Title 3 agreement and distributed free to needy people or under PL480 Title 2 agreement for free distribution and not for sale; and various other transfers such as pensions received by former employees of the Palestine Government under the Mandate and emigrants transfers (i.e. transfers from Jordanians who are permanently resident abroad). These foreign transfers to households have stood at a roughly constant level around the JD4 million mark per annum, and accordingly, as receipts from other sources expanded, their share in total receipts declined from 20 per cent in

1954 to about 7 per cent in 1966. In contrast receipts from current transfers to the government show an upward trend: in fact they initially increased very rapidly so that their contribution to total receipts increased from about 25 per cent in 1954-1956 to an average of 43 per cent during 1958-1960, declining thereafter in both absolute and relative terms but still contributing about 20 per cent as late as 1965-1966. Trends in this item are the result of policy changes on the side of the donor countries and especially the U.S.A. which from the mid-fifties onwards has contributed the largest part of this type of aid which will be further examined in relation to Public Finance in the relevant part of the thesis.

Secondly, as far as the share of factor income is concerned the main factor affecting this type of receipts has been the remittances sent by Jordanians temporarily abroad. Large numbers of Jordanians have been attracted to the neighbouring Arab oil countries in the Gulf area where there are severe manpower shortages in consequence of the rapid growth of economic activity in that thinly-populated area: for example there were 30,990 Jordanians in Kuwait in 1961 out of a total non-Kuwaiti Arab population of 121,143; by 1965 the number of Jordanians rose to 77,712 while the total non-Kuwaiti Arab population increased to 187,923 persons.[1]

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1. Ragaei El Mallakh, Economic Development and Regional Cooperation Kuwait (Chicago 1968), p. 173.

Thirdly, as far as the share of service exports is concerned, tourism has been behind the growth of revenue from this item; in fact by 1966 receipts from "travel" exceeded those from the exports of goods. In addition there has been also a rapid increase in receipts from "other services" which include receipts in respect of insurance and freight and the local expenditures of foreign diplomatic missions, UNRWA, charitable institutions and U.N. agencies. As a result the Jordan economy emerged as a net exporter of services, a fact which has been already noted in Chapter III in discussing the structure of the economy. The growth of such exports (i.e. tourism and other services) has contributed to the "import surplus" in stimulating the growth of tertiary sectors in the Jordan economy, a phenomenon which has already been examined in Chapter III.

Finally, as far as commodity exports are concerned, trends in this sector have already been examined in the present part of our study: in Table XVII we can see the reflection of the initial growth of exports (1954-1957), their decline (1958-1962) and their subsequent increase in the sixties. Trends in the agricultural sector plus the expansion of mining and manufactured products' exports have been indicated already as being the main factors behind these trends. In spite of the rapid growth of commodity exports in the latter part of our period (exports of goods nearly doubled in value between 1962 and 1964 as we can see from Table XVI) their contribution to total current receipts remains much lower than receipts from the other three

categories of services exports, factor income and transfers.

When we turn to consider the structure of current payments (Table XVIII) we find that, as is normally the case in most countries, commodity imports absorb the largest part of such payments.[1] However the increased share of service imports has resulted in a slight decline in the share of commodity imports which has fallen from about 91 per cent in 1958-1960 to about 87 per cent by 1964-1966. The increased share of services has come as a result of increased expenditure of Jordanians on travel plus increased outlays by the Jordan Government for non-commercial purposes abroad such as diplomatic missions' expenditures abroad which are classified under the "other services" item in Table XVI. The share of other items in total payments has been only minor: interest and dividends plus current government transfers to the rest of the world have accounted for between 1.3 per cent in 1954-1966 and 0.8 per cent in 1964-1966. Jordan of course has not been either an aid donor or an area attracting large-scale foreign investments (as is the case in the oil countries), and accordingly the shares of "current government transfers to the rest of the world" and "interest and dividends" in total payments have been negligible.

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1. Cf. Kuznets, op. cit., pp. 82-83.

TABLE XVIII: Structure of Current International Payments, 1954-1966 (percentage of total)

Year	Commodity Imports	Service Imports*	Interest and Dividends	Government Transfers
1954	93.0	6.0	1.0	-
1955	93.4	5.5	1.1	-
1956	92.1	6.0	1.9	-
1957	91.4	8.0	0.6	-
1958	92.4	7.3	0.3	-
1959	92.1	7.3	0.4	0.2
1960	90.6	9.0	0.2	0.2
1961	89.0	10.4	0.4	0.2
1962	86.1	13.2	0.6	0.1
1963	87.4	12.1	0.4	0.1
1964	86.4	12.7	0.8	0.1
1965	87.0	12.1	0.8	0.1
1966	87.2	12.1	0.6	0.1

* includes "travel" and "other services".

Source: Based on data given in Table XVI.

So far we have been examining the balance of payments on current account and we next turn to the balance of payments on capital account.

(b) Capital Account. - Details of the balance of payments on capital account (during 1954-1966) are given in Table XIX. In addition to the receipts of various foreign current transfers, Jordan has also received during our period various capital transfers. This type of transfers came under two main categories: non-repayable

TABLE XIX: Balance of Payments Capital Account, 1954-1966 (JD million)

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
1. Surplus of Nation on Current Account.....	0.50	-3.00	1.50	0.30	0.20	-4.99	-6.04	-2.33	-1.85	-14.77	2.91	-6.01	-12.86
2. Capital Transfers from Abroad.....	2.40	3.90	0.60	2.00	2.00	2.62	3.67	2.74	2.82	3.17	6.29	8.64	11.40
3. (a) Foreign Loans to Private Sector (net)	-	-	0.30	0.50	0.60	0.11	0.42	0.46	0.97	0.89	0.26	0.25	0.30
(b) Foreign Loans to Public Sector (net)	1.30	1.30	1.90	0.60	1.00	0.50	1.50	0.50	1.56	0.47	0.95	2.34	4.91
Total Foreign Loans..	1.30	1.30	2.20	0.10	1.60	0.61	1.92	0.96	2.53	1.36	1.21	2.59	5.21
4. Net Errors and Omissions.....	-0.20	0.20	-0.20	-0.50	0.10	0.50	1.13	0.24	-1.51	4.02	6.65	0.99	5.12
5. Net Change in Foreign Assets.....	4.00	2.40	4.10	1.70	3.90	-1.26	0.68	1.61	1.99	-6.22	17.06	6.21	8.87

NOTES:- 2. Includes cash grants made by foreign sources for development purposes (prior to 1964 these were received only from the USA but since that year such grants have also been received from Arab countries and West Germany); the value of foodstuffs received from the USA under PL480 Title 2 agreement for sale and not for free distribution; the value of certain equipment and other non-food goods that are received from the USA as part of development projects.

3(a). Loans for development in the private sector and remittances of private capital less repayment of loans.

3(b). Loans received by Jordan Government or its agencies less repayment of loans.

5. Change in foreign holdings of Central Bank and commercial banks (figures here differ from those given in Chapter III, part II, which are based on IFS data which include changes in holdings of gold and other assets by the currency-issuing authority). As the figure of the change in these assets is known item 4 is inserted as a balancing item.

Source: R.S. Porter, op. cit., p. 12; the National Accounts 1959-1966, pp. 21 and 72-74.

capital transfers from abroad for specific development projects received largely from the U.S.A. but in addition were also received towards the end of the period from West Germany and various Arab countries; and foreign loans to the government. The former type of transfer in fact shows rapid growth in the latter part of our period when, as we have already seen, foreign current transfers were reduced. This came partly as a result of a change in policy on the part of the main aid donor (the U.S.A.) whereby more emphasis started to be placed on aid for specific development purposes rather than aid for general consumption purposes. In addition the emergence of new sources of aid, such as West Germany and Arab countries, contributed to the rapid increase of these capital transfers from abroad. As far as foreign official loans are concerned, they show large increases in the closing years of our period when they reach JD 2.3 million in 1965 and JD 4.9 million in 1966. These loans, together with capital transfers, will be examined in that part of our thesis dealing with Public Finance where the various types of foreign transfers to the government are analysed. Finally, as far as foreign loans to the private sector were concerned, their contribution to total capital transfers from abroad has been only a minor one, although various measures were undertaken by the government to encourage the inflow of foreign private capital. These measures are described in that part dealing with "special legislation" in the chapter on the Finance of Development, and as we have already noted, Jordan has not had the

mineral or other types of resources that can normally attract foreign capital on a large scale, and of course the narrowness of the Jordan market does not attract foreign investments for such other purposes as manufacturing for example.

The inflow of these types of aid on capital account, plus the inflow of the other foreign current transfers, have been in fact of a very substantial magnitude. Comparison with other countries reveals that Jordan has had one of the highest ratios of foreign transfers (both current and capital) to income. This aspect of the Jordan economy will be examined in the chapter dealing with the Finance of Development where the contribution (and implications) of these foreign transfers to the development of the Jordan economy are analysed.

CHAPTER VII

CHAPTER VII:

PUBLIC REVENUE AND EXPENDITURE

The participation of the government in economic activity (as measured by the level of public revenue and expenditure in relation to total income) tends to expand in the process of economic development. The position in the developed countries where government revenue can reach as high as one third of GDP (e.g. the U.K. 35 per cent; Sweden 31 per cent) contrasts quite sharply with that in the developing countries where such revenue can be as low as one tenth or less of GDP (e.g. India 8 per cent; Pakistan 9 per cent).[1] Although there is a general tendency for higher ratios of government revenue and expenditure to total income to be associated with higher levels of economic development, a host of other factors can, and in fact do, have considerable influences in this respect: to take just two examples, oil revenues in the case of Venezuela, and export taxes on tea in the case of Ceylon, result in an expansion of their respective governments' revenues to higher levels than one expects to find at their levels of development.

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1. H.T. Oshima, "Share of Government in Gross National Product for Various Countries," The American Ecohomic Review, XLVII (June 1957), pp. 381-390.

The government in Jordan throughout our period has been participating quite extensively in economic activity as can be judged from the high ratio of government expenditure to GDP which has stood at about 30 per cent and more during the period 1954-1966 (see Table I).

TABLE I: Total Public Expenditure and its Percentage Ratio to GDP 1954-1966

Year	Total Expenditure JDm.	GDP JDm.	Expenditure as Percentage of GDP
1954	16.2	52.44	31
1955	17.3	47.89	36
1956	19.5	66.64	29
1957	22.8	68.57	33
1958	29.7	77.99	38
1959	31.33	85.17	37
1960	32.48	89.44	36
1961	34.36	110.87	31
1962	38.58	108.62	36
1963	41.54	117.67	35
1964	40.17	135.52	30
1965	49.83	150.95	33
1966	54.94	149.74	37
Average Ratio 1954-66			34

Source: R.S. Porter, op. cit., p. 9; The National Accounts 1959-1966, p. 20.

Thus the extent of the government's participation in economic activity in Jordan is comparable to that in the more advanced of the developed countries. How did the government, in a country with a relatively low income level such as Jordan, manage to finance such a high level of expenditure, bearing in mind that the economy was organized by and large on a free-enterprise basis? To examine this question let us proceed to look at public revenue during this period.

1. Public Revenue

Details of public revenue by main items during 1954-1966 are given in Table II. It can immediately be noticed that various foreign transfers to the government have contributed substantially to total public receipts throughout our period. In fact, in nine out of the thirteen years under consideration such foreign receipts accruing to the government have exceeded the value of the total revenue of the government collected domestically through various taxes and other sources of revenue. Not only do foreign transfers to the government stand at a high level initially (accounting for 52 per cent of total public revenue in 1954) but in the second half of the fifties and up to 1962 they in fact grow at a more rapid rate than domestic revenue. However, from 1962 onwards, domestic receipts show a more rapid pace of growth so that by the end of our period they start to exceed foreign recipts both in their absolute magnitude and in their relative

TABLE II: Public Revenue, 1954-1966 (JD million)

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
1. Domestic Revenue:													
(a) Indirect Taxes	3.60	4.40	5.00	5.60	6.30	8.36	8.86	9.27	10.28	11.39	13.43	16.66	20.89
(b) Direct Taxes	0.90	0.90	1.00	1.10	1.20	1.48	1.68	1.92	1.98	2.31	2.51	3.10	3.33
(c) Income from Property and Entrepreneurship	2.60	2.60	2.50	2.70	3.00	1.80	2.00	2.03	6.94*	3.66	3.34	3.87	5.74
(d) Other Current Transfers from Households						2.36	2.36	2.75	2.65	3.04	3.53	4.49	4.43
Total	7.10	7.90	8.50	9.40	10.50	14.00	14.90	15.97	21.85	20.40	22.81	28.13	34.39
2. Foreign Revenue:													
(a) Current Transfers	5.20	5.90	7.30	10.20	17.10	16.69	16.52	16.52	15.39	13.28	19.51‡	11.83	12.39
(b) Capital Transfers	1.30	3.20	0.50	2.00	2.00	2.62	3.67	2.74	2.82	3.17	6.29	8.64	11.40
(c) Loans (net)	1.30	1.30	1.90	3.30	1.00	0.50	1.50	0.50	1.56	0.47	0.95	2.34	4.91
Total	7.80	10.40	9.70	15.50	20.10	19.81	21.69	19.76	19.77	16.92	26.75	22.81	28.70
TOTAL PUBLIC REVENUE (1. + 2.)	14.90	18.30	18.20	24.90	30.60	33.81	36.59	35.73	41.62	37.32	49.56	50.93	63.09

* includes an exceptional payment of JD 3.68 million from Trans-Arabian Pipe Line Co. in respect of previous years' arrears.

‡ includes JD 5 million Kuwaiti loan for budget support.

Source: R.S. Porter, op. cit., p. 9; The National Accounts 1959-1966, pp. 18 and 20.

growth (Table III). While total public revenue increased by slightly more than fourfold from JD15 million in 1954 to JD63 million in 1963, domestic revenue increased by 384 per cent and foreign revenue by 368 per cent during the same period. To be sure, these foreign receipts have enabled the government to balance its budget and to finance its relatively high level of expenditures without resort to one or the other methods of deficit finance. The absence of any public borrowing from either the banking system or the general public is a main feature of public finance in Jordan during our period. In fact this feature is one that Jordan has in common with those British Commonwealth countries which have emerged with broadly the same type of monetary systems, known as the sterling exchange standard.[1]

Let us proceed now to examine factors behind these trends in the two main divisions of public revenue: domestic and foreign.

(a) Domestic Revenue

The revenue collected domestically by the government increased from JD7 million in 1954 to JD34 million in 1966, and the composition of this revenue by main type can be seen from Table II. The total domestic receipts of the government have tended to grow more rapidly than the growth of total production in the economy during this period,

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1. See A.R. Prest, Public Finance in Underdeveloped Countries (London 1968), Chapter 5 on "Debt Policy". This aspect of public finance in Jordan has been further examined in Chapter III, Part II supra.

TABLE III: Public Revenue: Indices of Growth of Domestic and Foreign Revenues and their Percentage Ratio to Total Revenue, 1954-1966

Year	Domestic Revenue*		Foreign Revenue‡	
	Index (1954 = 100)	Percentage of Total Revenue	Index (1954 = 100)	Percentage of Total Revenue
1954	100	48	100	52
1955	111	43	133	57
1956	120	47	124	53
1957	132	38	199	62
1958	148	34	258	66
1959	197	41	254	59
1960	210	41	278	59
1961	225	45	253	55
1962	308	53	254	47
1963	287	55	217	45
1964	321	46	343	54
1965	396	55	292	45
1966	484	55	368	45

* domestic revenue comprises the following items as shown in Table II: indirect taxes; direct taxes; income from property and entrepreneurship; and other current transfers from households.

‡ foreign revenue comprises the following items as shown in Table II: current transfers from abroad; budget support loan from abroad; capital transfers from abroad; foreign loans (net).

Source: Calculated from data in Table II.

and thus their ratio to GDP has risen from an average of 14 per cent in 1954-1956 to an average of 20 per cent in 1964-1966:-

TABLE IV: Government Domestic Revenue and its Components as Percentage of GDP, 1954-1966

Year	Total Domestic Revenue %	Indirect Taxes %	Direct Taxes %	Other Revenue %
1954	13.6	6.9	1.7	5.0
1955	16.5	9.2	1.9	5.4
1956	12.8	7.5	1.5	3.8
1957	13.7	8.2	1.6	3.9
1958	13.4	8.1	1.5	3.8
1959	16.4	9.8	1.7	4.9
1960	16.7	9.9	1.9	4.9
1961	14.4	8.4	1.7	4.3
1962	20.1	9.5	1.8	8.8
1963	17.4	9.7	2.0	5.7
1964	16.9	9.9	1.9	5.1
1965	18.6	11.0	2.1	5.5
1966	23.0	14.0	2.2	6.8

Source: Calculated from data already given.

The first point that transpires regarding the domestic revenue of the government is that in spite of the government's heavy reliance on foreign sources of finance, the share of the public sector in GDP (i.e. the domestic revenue of the government) has by no means been exceptionally on the low side or reduced. This can be clearly seen when we compare these data for Jordan with data available for the developing countries.

TABLE V: Developing Countries: Government Disposable Income and its Components, Average 1962-1964* (% of GDP)

Country ‡	Government Disposable Income x	Direct Taxes	Indirect Taxes	Other Income	Net Transfers ø	Less Subsidies
Venezuela	22	9	9	6	-1	
Federation of Malaya	21	6	13	2		
Israel	20	10	17	1	-4	4
Ecuador	18	7	9	6	-4	
China (Taiwan)	17	2	12	3		
Jordan	16	2	9	3	2	
Burma	15	4	10	2		
Rhodesia & Nyasaland	15	10	6	2	-2	
Mauritius	15	5	12	1	-3	
Costa Rica	14	4	10	1	-1	1
Trinidad & Tobago	13	6	6	3	-1	1
Chile	13	11	10	1	-7	2
Panama	13	5	8			
Jamaica	13	6	9		-2	1
Republic of Vietnam	13	1	12			
Republic of Korea	12	3	7	1		
Ghana	11	3	10		-1	
Philippines	11	4	8		-1	
Tanganyika	11	4	6	1	-1	
India	10	3	8			1
Colombia	9	4	6	1	-1	
Honduras	9	1	8			
Bolivia	9	4	8	1	-4	1
Guatemala	9	2	7	1		

* minor differences exist in time period and concepts. See source for such details.

‡ countries are arranged in descending order of percentage of disposable income to GDP.

x disposable income is defined as the sum of direct and indirect taxes and other incomes, minus subsidies and net transfers to households and private non-profit institutions. It excludes transfers to and from abroad.

ø net transfers are shown with a reversal sign as a deduction from government income.

Source: U.N., World Economic Survey (New York 1966), p. 22.

This international cross-section shows that the share of governments in GDP in the developing countries varies from a minumum of 9 per cent to a maximum of 22 per cent. In Jordan this share stood at 16 per cent which is nearer the higher levels found in the developing countries thus indicating that the relatively large foreign transfers received by the government have been more complementary to than substitutes for the domestic collection of revenue by the government. Thus the government in Jordan has managed to collect a level of revenue comparable to the highest levels found amongst the developing countries bearing in mind that the government in Jordan, unlike the governments in most of those developing countries with a high share of government in GDP, has had no "easy revenues" at hand such as export taxes on raw materials (e.g. oil, tin) and/or share in profits.

The high share of government in GDP in Jordan is accounted for by two inter-related factors: on the one hand the "openness" of the economy as far as imports are concerned, and the effort of the government to reduce its dependence on foreign revenues through increasing its domestic collection of revenue on the other. In the early sixties foreign aid to the budget was scheduled by the aid donors (mainly the U.S.A.) for a decline and accordingly the government had to plan for a higher level of domestic revenue to make up for the scheduled decline in its total revenues. Ultimately this effort by the government to increase its domestic revenue fell

back on the first factor, the openness of the economy. But before going into a detailed examination of trends in the various components of government's domestic revenue we shall first compare the overall trends in Jordan in this respect with those found in the developing countries in recent years.

When we examine the domestic revenue of the government in Jordan by its main components we find that the position in this regard is similar to that found in the developing countries in general with a relatively heavier reliance on indirect rather than direct taxes.[1] The relative values of the three main components of government revenue in Jordan and in the developing countries can be seen from Tables IV and V where it is found that indirect taxes are relied upon for revenue purposes to a much heavier extent than direct taxes: thus, for example, in Jordan while the share of the government in GDP has been about 16 per cent in 1961-1963, indirect

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1. No attempt is made in what follows to suggest that less developed countries depend more heavily on indirect taxes than the developed countries. For a critical view of such normally assumed heavier dependence on indirect taxation in the developing rather than the developed countries see Douglas Dosser, "Indirect Taxation and Economic Development," printed in Alan T. Peacock and Gerald Hauser (eds.), Government Finance and Economic Development (Paris: O.E.C.D. 1965), pp. 127-142. On this point see also R.H. Bird and O. Oldman (eds.), Readings on Taxation in Developing Countries (Baltimore 1967), p. 68, where it is mentioned that "recent developments in Europe indicate that some high income countries may be returning to greater reliance on indirect taxes, particularly general sales taxes."

taxes reach a ratio of 9 per cent of GDP while direct ones reach no more than 2 per cent (Table IV and V). This rôle of indirect taxes as the main source of public revenue in Jordan (as in the majority of the developing countries) is attributable to the historical rôle of such sources of revenue as customs duties and the relative ease with which such duties and other indirect taxes can be administered as compared with the administrative and other difficulties associated with directly taxing the income and wealth of the low-income populations of the less developed countries. In fact in only four of the twenty-four countries listed in Table V do public revenues from direct taxes exceed those from indirect ones: this is the result of all of these four countries (Chile, Rhodesia and Nyasaland, Trinidad and Tobago, Venezuela) being major mineral exporters whose governments can more easily levy and collect direct taxes on the exporting enterprises. Similar factors lie behind receipts under the "other revenue" category which, for example in the case of Jordan, include such items as various fines and licences, government's profits from the sale of state domain and from its shareholding in local enterprises, pipe line royalties, etc., which can be more easily administered than direct taxes.

So far in our examination of public domestic revenue we have seen the position of this revenue and its components in the Jordan economy in comparison with the other developing economies. As far as trends in this revenue during our period are concerned, we saw

that government total domestic receipts in Jordan have tended to increase at a more rapid rate than total production (Table IV). Examination of further data (Table VI) would reveal that this tendency for government domestic revenue to increase faster than GDP can be found in a number of developing countries: in fact in only a minority of developing countries (six out of the twenty-four in Table VI) did government revenue grow at a slower rate than the growth of total production in the period between 1953-1955 to 1962-1964. As far as the components of government domestic revenue are concerned, indirect taxes show a less widespread gain in their relative importance in the developing countries as compared with direct taxes. In fact in only a minority of countries did indirect tax receipts grow faster than total production during this same period. Thus, although governments rely heavily upon indirect taxes for their revenue, there has been a general tendency for direct taxes to increase their relative contribution to total tax receipts (see Table VI). In this respect Jordan falls amongst a minority of developing countries where indirect tax receipts have grown more rapidly than total production, and where these indirect taxes have increased rather than decreased their relative contribution to total tax receipts over the period under consideration. To be sure, the level of the relative contribution of direct taxes to total tax receipts in Jordan has been both at the outset (18 per cent) and at the end (16 per cent) of this period amongst the lowest found in the developing countries, thus

TABLE VI: Developing Countries: Changes in Levels of Government Disposable Income and Components; and Components of Total Tax Receipts: 1953-1955 and 1962-1964 *

Country‡	Disposable Income	Direct Taxes	Indirect Taxes x	Indirect Taxes		Direct Taxes	
				1953-55	1962-64	1953-55	1962-64
	(Changes in percentage of GDP) ø			(Percentage of total tax receipts)			
Israel	+5	+3	+4	62	63	38	37
Republic of Korea	+5	+1	+2	72	67	28	33
Jordan	+2	...	+2	82	84	18	16
Chile	+2	+2	+2	45	47	55	53
Ecuador	+2	+3	-1	76	57	24	43
Jamaica	+2	+3	+1	71	62	29	38
India	+2	+1	+2	68	73	32	27
Philippines	+2	+2	+1	79	70	21	30
Mauritius	+2	-1	+4	58	71	42	29
Rhodesia & Nyasaland	+1	...	+2	30	35	70	65
Panama	...	+1	...	64	61	36	39
Honduras	...	...	...	85	84	15	16
Uruguay	...	+3	-1	52	44	48	56
Costa Rica	...	+1	...	73	70	27	30
Trinidad & Tobago	-1	. . .	...	54	50	46	50
China (Taiwan)	-1	-1	-1	83	84	17	16
Guatemala	-1	...	-1	78	76	22	24
Ghana	-1	+1	...	84	78	16	22
Colombia	-2	...	-2	64	57	36	43
Burma	-2	...	-3	75	69	25	31

* minor differences exist in respect of time period and coverage. See source for details. For Jordan the periods are: 1954-1956 and 1963-1965.

‡ countries are arranged in descending order of changes in level of disposable income.

x indirect taxes minus subsidies.

ø values represent differences between respective levels of disposable income and taxes (as percentage of GDP) in 1962-1964 as compared with 1953-1955. A minus sign indicates a lower level at the end period as compared with the initial period. No change is indicated by the sign (...).

Source: U.N., World Economic Survey, pp. 24 and 27. Data for Jordan derived from our data given previously.

reflecting a relatively heavier reliance by the government in Jordan on indirect taxes as compared with the other developing countries.

The U.N. World Economic Survey 1965 has attributed the tendency for the relative importance of indirect taxes to decline to two main factors: the effect of the process of development upon imports, and fluctuations in the prices of the exports of developing countries.[1] Yields from taxes on imports and exports account for a considerable part of total indirect tax receipts in the developing countries. Receipts from import duties have been prevented from growing more rapidly through one or the other of the factors associated with development: the attempt to create import-substituting industries; the change in the composition of imports as items such as capital equipment and raw materials which tend to be allowed in duty-free gain in importance; the attempt to save scarce foreign exchange required for development, etc. As far as export taxes are concerned, the downward drift during this period in the prices of the exports of the developing countries upon which export taxes are levied has tended to reduce the relative importance of exports in total production in the developing countries, thus impeding any faster growth in the revenues derived from taxes upon these exports.

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1. U.N., World Economic Survey 1965 (New York 1966), Part I, p. 25. The comments that follow regarding these trends are based on those given in the Survey.

Now as far as direct taxes are concerned the tendency for such taxes to gain in relative importance can be associated with the process of development: higher personal incomes; more efficient administration; monetization of the economy and the growth of new profit-making entities are all parts of the process of development which make possible the expansion of receipts from direct taxes.

However, in the case of Jordan we have seen that indirect taxes show a tendency to gain in relative importance as compared with direct taxes, contrary to the general tendency in the developing countries. Let us proceed to analyse the factors behind these trends in Jordan to see why they differ from the trends just examined in relation with the developing countries in general. We start by examining indirect taxes during this period.

(i) Indirect taxes. - We have seen that indirect taxes in Jordan, as in most developing countries, represent the main source of tax revenue. Unlike the general trend in the developing countries, however, indirect taxes in Jordan show an increase in their relative contribution to total tax receipts. To see why this should have been so, let us examine details of the main components of indirect taxes in Jordan during the period under review.

Throughout the period customs duties on imports have been the major component of indirect taxes, and trends in this sphere lie behind the increasing relative importance of indirect taxation in

TABLE VII: Indirect Taxes:* Components, Fiscal Years 1954/55 to 1965/66

Year	Customs		Excise		Licences and Fees		National Guard Tax		Total
	JD000	%	JD000	%	JD000	%	JD000	%	JD000
1954/55	3,016	80.5	b		691	18.4	42	1.1	3,749
1955/56	3,512	76.3	b		803	17.4	290	6.3	4,605
1956/57	3,577	76.8	b		757	16.3	321	6.9	4,655
1957/58	4,303	77.6	b		879	15.8	365	6.6	5,547
1958/59	4,415	63.5	b		2,147	30.9	390	5.6	6,952
1959/60	5,631	63.7	b		2,753	31.1	463	5.2	8,847
1960/61	5,027	54.1	644	6.9	2,956	31.9	660	7.1	9,287
1961/62	4,622	46.4	1,516	15.2	2,942	29.5	884	8.9	9,964
1962/63	5,004	45.7	1,495	13.7	3,271	29.9	1,166	10.7	10,936
1963/64	5,190	41.7	2,144	17.2	3,832	30.8	1,279	10.3	12,445
1964/65	6,187	44.6	2,540	18.3	3,819	27.5	1,326	9.6	13,872

* as data are here based on fiscal year basis they differ slightly from National Accounts data previously presented, which are given on a calendar year basis.

b up to 1959/60 customs include excise.

Source: Ministry of Finance, Annual Reports (Amman).

Jordan. Trends in imports themselves have been already examined in that part of our study dealing with foreign trade, where we found that imports have occupied quite an important position in the Jordan economy with their value averaging over 40 per cent of GDP during our period. This openness of the Jordan economy as far as imports are concerned has been already mentioned as being a factor behind the relatively high share of the government in GDP. In fact a positive

association was found to exist between the degree of openness (the ratio of imports and exports to GNP) and the tax ratio in a number of developing countries[1] and empirical evidence indicates that the degree of openness is a major factor determining the public revenue/national income ratios in low income countries.[2]

While the large proportion of imports in the Jordan economy has been a major factor behind the high share of the government in GDP and behind the relative importance of indirect taxes in total tax receipts, two further factors lie behind the particular trends in indirect tax receipts in Jordan which as we have seen have differed from trends in the developing countries in general in this respect. Firstly the factor of the downward drift in the prices of exports, which has been indicated as being behind the slower growth in government revenues derived from taxes on exports, is entirely absent from Jordan as no such taxes are levied on exports in Jordan. Secondly, the effect of economic development upon revenues from import duties has either been mild in Jordan or, whenever it has occurred, has been compensated for by the emergence of new indirect taxes as a result of economic development itself. Thus as we have seen in that part of our study dealing with foreign trade, imports in general have continued

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1. See U.N. Commission for Asia and the Far East, Tax Potential and Economic Growth in the Countries of the ECAFE Region, paper presented at the Fourth Workshop on Problems of Budget Reclassification and Management, Bangkok, Thailand, Aug. 22-Sept 2, 1966. Reprinted in Bird and Oldman, op. cit., pp. 96-103.

2. See Harley H. Hinrichs, A General Theory of Tax Structure Change during Economic Development (Cambridge, Mass., 1966).

to show a rapid growth in parallel to the growth of income during our period. This has been especially true of those items of imports upon which the bulk of customs duties are levied. Details of customs duties on imports reveal that during 1965-1966 about 70 per cent of customs revenue was derived from duties on a limited number of categories: duties on agricultural products and manufactured foodstuffs have contributed about 25 per cent of total customs revenue in 1965-1966; those on textiles have contributed another 18 per cent, those on transport equipment a further 16 per cent, and duties on metallic mineral products another 8 per cent.[1] Imports of such items have continued to show rapid growth throughout our period and thus revenues derived from duties levied on them have expanded rapidly as well.

However to take account of the other factor in this sphere of economic development and its effect on import duties revenues, the rapid development in Jordan of import-substituting industries has had its effects just as similar developments affected this type of indirect tax revenues in the other developing countries. To be sure we have already seen in that part of our study dealing with foreign trade that a shift occurred between the different categories of imports so that intermediate goods imports gained in relative importance at the expense of consumer goods as a result of the setting

1. Percentages derived from Department of Statistics, Some Economic Indicators, Amman 1968, Table 4.

up of import-substituting industries that rely on the imports of raw materials for their production. However, whatever effect this shift might have had on government's revenues derived from import duties has been compensated for by the levying of excise taxes on the products of many of these import-substituting industries. Thus although raw materials imports are more lightly taxed than consumer goods in general, any loss in revenue (or retardation of a more rapid growth in revenue) was made up for by the rapid increase in revenues from excise duties which have increased their yield by fourfold during 1960/61-1964/65 from about JD 600,000 to JD 2,500,000 in this four-year period (Table VII). New industries were created (e.g. petroleum refining) and existing ones (e.g. cigarettes, alcoholic beverages, cement) were rapidly expanded thus enabling the government to collect an increasing revenue from excise duties on items upon which excise duties are traditionally levied, e.g. tobacco. We saw in that part of our study dealing with manufacturing that a rapid expansion occurred in the production of domestic manufacturing industries,[1] and one side-effect of this rapid growth has been the rapid increase in yields of excise duties levied on their products.

Here we can clearly see reasons behind the rapid growth of revenue derived from indirect taxes: the rapid growth in imports and the rapid growth in domestic production of items upon which excise

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1. See Chapter V, Table VI *supra*.

duties are levied. In addition the other categories of indirect taxes have further contributed to the growth of this type of revenue. Thus revenues from various licences (import licences, trade licences, vehicle licences, etc.) and various fees (e.g. stamp fees and court fees) have expanded in line with the general expansion of economic activity as would be expected. The remaining category of indirect taxes shown in Table VII (the National Guard Tax) similarly shows a rising trend in its yield in line with the general rise in economic activity since it is partly an excise tax (e.g. on cement production) and partly a fee tax (e.g. in respect of foreign currency permits) and is so called as its revenues are supposed to finance expenditures on the National Guard forces.

Before turning to examine trends in direct taxes mention ought to be made of an important aspect of the growth of public revenue from indirect taxes during our period which has implications for our classification of government revenue into "domestic" and "foreign". The growth of receipts from import duties has been a major source, as we have just seen, of the growth of public revenue from indirect taxes. One ought perhaps to keep in mind that the rapid growth of imports which made possible this rapid growth of revenue from import duties was itself dependent in no small way upon various forms of foreign transfers received by the government (i.e. the "foreign revenue" of the government) and by the private sector, which contributed substantially, as we saw in that part of our study dealing with the balance of

payments to the foreign exchange receipts that have gone to finance the import bill of the country. In that same part of our study mention was also made of the possible effect of foreign financing (i.e. the inflow of foreign resources) on the foreign trade proportions in an economy. In Jordan the foreign trade proportions, or the openness of the economy as far as imports are concerned, have been effectively augmented through the inflow of foreign resources. And upon this openness itself depends as we have seen the larger part of public domestic revenue.

(ii) Direct taxes. - Having seen the main factors behind trends in indirect tax revenue during this period let us now turn to the question of direct taxes. Although direct taxes still account for a minor part of total tax receipts by the end of our period in Jordan, there has been a rapid growth in their absolute yield from less than JD1 million in 1954 to over JD3 million in 1966 (Table II). Details of various components of direct taxes reveal that the main expansion occurred in the yield of income and company taxes (which account for the main part of direct tax revenue) and in receipts from taxes on urban property.

The situation in Jordan regarding direct taxes on the income and property of individuals is typical of that normally associated with the developing countries. The very limited base of income tax is revealed by the fact that in the fiscal year 1958/59 there were only about 30,000 assessees in all: this comes to less than 2 per cent of

TABLE VIII: Direct Taxes: Components, Fiscal Years 1954/55 to 1964/65

Year	Income and Company Taxes		Urban Property Tax		Rural Property Tax		Livestock Tax		Social Welfare Tax		Total*
	JD000	%	JD000	%	JD000	%	JD000	%	JD000	%	JD000
1954/55	347	41.4	169	20.2	153	18.2	133	15.9	36	4.3	838
1955/56	394	45.7	178	20.7	76	8.8	163	18.9	51	5.9	862
1956/57	515	47.2	201	18.4	163	14.9	158	14.5	55	5.0	1,092
1957/58	553	48.2	244	21.3	158	13.8	126	11.0	65	5.7	1,146
1958/59	621	59.9	266	25.7	73	7.0	15	1.5	61	5.9	1,036
1959/60	715	57.5	308	24.8	86	6.9	60	4.8	75	6.0	1,244
1960/61	824	63.4	335	25.8	10	0.8	59	4.5	72	5.5	1,300
1961/62	927	60.8	387	28.4	89	5.8	44	2.9	78	5.1	1,525
1962/63	1,145	63.9	427	23.9	25	1.4	106	5.9	88	4.9	1,791
1963/64	1,331	66.1	460	22.9	36	1.8	77	3.8	108	5.4	2,021
1964/65	1,301	64.4	496	24.5	44	2.2	74	3.7	105	5.2	2,020

* total here differs from that given in Table II because of differences in classification and in time periods.

Source: Ministry of Finance, Annual Reports (Amman).

the total population of that year and represents no more than 10 per cent of the total economically active population which was found to be in 1961 about 390,000 persons. Moreover, the total taxable income of the total number of assessees in that same fiscal year amounted to only about JD 7 million which comes to no more than 9 per cent of the GDP average for 1958/59.[1]

TABLE IX: Income Tax:* Number of Assessees, Taxable Income and Tax Assessed by Income Groups and Tax Rates, 1958/59

Income Group JD	Tax Rate %	Number of Assessees		Taxable Income		Tax Assessed	
		No.	%	JD000	%	JD000	%
Less than 400	5	25,558	85.4	3,053	42.9	152	24.6
400-800	7	2,638	8.8	1,304	18.3	72	11.7
800-1200	10	751	2.5	701	9.8	47	7.6
1200-1600	15	392	1.3	501	7.0	42	6.8
1600-2000	20	225	0.8	362	5.1	37	6.0
2000-2400	25	130	0.4	260	3.7	33	5.4
2400-2800	30	85	0.3	194	2.7	29	4.7
2800 and over	50	141	0.5	750	10.5	205	33.2
Total:		29,920	100.0	7,125	100.0	617	100.0

* excluding limited liability companies.

Source: Report of the Royal Fiscal Commission (Amman 1959).

1. In the U.K. and the U.S.A. 30-40 per cent of the total population pay income tax each year, and in the U.K. income assessed to personal income tax amounts to some 75 per cent of GNP (A.R. Prest, op. cit., p. 28).

Other than income tax, the taxes on property fall under three main heads: urban property tax which is imposed on buildings and lands within municipalities; rural property tax which is imposed on agricultural land and industrial buildings; and the livestock tax which is a per head tax imposed on animals other than those used for ploughing. The Social Welfare tax is a mixture of levies added to the various taxes and was instituted in 1953. The only tax of those various types levied on property that shows any significant increase is the urban property tax reflecting the very rapid urbanization that has occurred during our period. Livestock and rural property taxes in fact show a decline in yields as a result of repeated crop failures in the latter part of the fifties which seem to have prompted the government to levy such taxes without stringency in addition to the expected decline in their yields in years of crop failure. In fact by the end of our period the main part of direct taxes yield was derived from income taxes and urban property taxes which together contributed about 90 per cent of total direct taxes receipts in 1964/65, whereas at the outset of our period their relative contribution was only 62 per cent (see Table VIII).

(b) Foreign Revenue

We saw earlier on that throughout the period 1954-1966 about one half of total public revenue was derived from external sources (Tables II and III). This foreign revenue came under three main catogories: firstly there were current transfers in the form of

non-repayable grants going to assist the budget in financing various public expenditures (donated by U.S.A. and U.K. governments); secondly there were capital transfers which came either in cash or in kind (PL480, Title 2, food grants; or various equipment for development purposes) to finance specific capital projects and which were mainly derived from the U.S.A. in addition to some Arab and West German grants (towards the end of the period); and thirdly there were foreign loans, details of which will be examined later on.[1]

These data (Table X) reveal that there have been three distinct phases in the growth of foreign assistance received by the government. Initially, from 1954 to 1958 there was a tremendous increase in the budgetary aid to the government coming under the current transfers category. Aid received under the two other categories does not show any significant change, with more emphasis being placed upon just financing government's ordinary operations. However from 1958 onwards the upward trend in these current transfers is replaced by a stationary level around JD17 million per annum. In fact the other two categories of receipts similarly show a constant level thus resulting in a roughly constant level of total foreign receipts during 1958-1962 around the JD20 million mark. However from 1962 onwards a rapid change occurs in the structure of these foreign receipts whereby

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1. The items comprising the foreign revenue of the government are not described in detail here as this is done in connection with the balance of payments in Chapter VI.

TABLE X: Government Foreign Revenue, 1954-1966

Year	Current Transfers		Capital Transfers		Loans		Total	
	JDm.	Index	JDm.	Index	JDm.	Index	JDm.	Index
1954	5.20	100	1.30	100	1.30	100	7.80	100
1955	5.90	113	3.20	246	1.30	100	10.40	133
1956	7.30	140	0.50	38	1.90	146	9.70	124
1957	10.20	196	2.00	154	3.30	254	15.50	199
1958	17.10	329	2.00	154	1.00	77	20.10	258
1959	16.69	321	2.62	202	0.50	38	19.81	254
1960	16.52	318	3.67	282	1.50	115	21.69	278
1961	16.52	318	2.74	211	0.50	38	19.76	253
1962	15.39	296	2.82	217	1.56	120	19.77	253
1963	15.28	255	3.17	244	0.47	36	16.92	217
1964	14.51	279	6.29	484	5.95	458	26.75	343
1965	11.83	228	8.64	665	2.34	180	22.81	292
1966	12.39	238	11.40	877	4.91	378	28.70	368

Source: Table II.

current transfers show a downward trend, but with a counter-balancing upward trend in the other two categories of aid and especially in the capital transfers category which by 1966 reached a level comparable to that of current transfers. This rapid change in the types of aid however does not result in a net reduction but in fact increases the total foreign receipts of the government from their previous level of about JD 20 million (which had been maintained during 1958-1962) to nearly JD 29 million by 1966, although a momentary fall occurs in 1963

when current transfers were reduced without a rise in receipts from the other categories. This changed structure of aid came as a result of a policy change on the side of the aid donors (mainly the U.S.A.) with more emphasis becoming increasingly placed on aid for specific development purposes rather than the previous emphasis on budgetary aid which was accordingly scheduled for successive reductions starting from 1962. This change in the type of aid is clearly indicated by Table XI.

In addition to the policy-change on the side of the main aid-donor indicated in Table XI, the changed structure of aid also came about as a result of the emergence of new sources of assistance mainly on a loan basis. Thus aid in the form of loans was for the first time received from sources other than the U.K. and the U.S.A. governments from 1962/63 and onwards. Loans from Kuwait, West Germany and the I.D.A. came to contribute significantly to the foreign receipts of the government, and helped finance several specific projects as described in the notes to Table XII. The largest single source of loans for development purposes has been the U.K. which provided close on one half of the total loans received by the government as of the end of our period. A large part of these loans from the U.K. government came initially when the U.K. was the only source of external aid. Thus out of the JD13.6 million loans received from the U.K., JD8.6 million were made in the period 1950/51 to 1956/57 and helped set up the Development Board of the Ministry of National

TABLE XI: Type and Source of Foreign Aid received by Central Government* 1960/61-1965/66 (JD000)

Type and Source	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66
1. Current Transfers						
U.S.A.	14,436	14,102	13,167	12,504	12,182	11,436
U.K.	2,000	2,317	1,522	1,500	1,500	1,400
Total	16,436	16,419	14,689	14,004	13,682	12,836
2. Capital Transfers						
U.S.A.	1,123	1,979	1,016	1,625	1,647	1,912
W. Germany				57	78	50
Arab League						474
Total	1,123	1,979	1,016	1,682	1,725	2,436
3. Loans						
U.K.	500	500	700	700	700	700
W. Germany			450	478	170	206
Kuweit			893	123	5,585	869
I.D.A.					519	812
U.S.A.						
Total		500	2,043	1,301	6,974	2,587
TOTAL FOREIGN AID	18,059	18,898	17,748	16,987	22,381	17,859

* differences exist between these data and previous data based on National Accounts as a result of minor differences in classification and coverage, e.g. whereas values of food grants under PL480, Title 2, are included under capital transfers in the National Accounts, here no account is taken of such item. Moreover, unlike National Accounts data, these data are based on a fiscal year basis.

Source: Central Bank of Jordan, Amman, Quarterly Bulletin, 1965(3) and 1967(1).

Economy which was entrusted with the utilization of these loans which were interest-free.[1] The new loans contracted in the latter part of our period all bear interest but of a low level (e.g. 3-4 per cent on the Kuwaiti loans) and their servicing up to 1967 did not amount to more than 7 per cent of the export earnings of 1966 alone (interest charges repayments up to 30/9/1967 came to JD 620,0 . compared with a figure of JD 8.8 million for domestic exports in 1966 alone).

TABLE XII: Government External Debt as of 30/9/1967 (JD000)

Source	Amounts Contracted	Amounts Withdrawn	Amounts Repaid		Balance of Loans Contracted	Balance of Outstanding Debt
			Principal	Interest		
1. United Kingdom.....	14,467	13,567			900	13,567
2. I.D.A.....	3,574	2,359		29	1,215	2,359
3. USAID.....	6,374	1,201	228	89	5,173	973
4. West Germany.....	3,685	1,558	158	120	2,127	1,400
5. Kuwait.....	13,540	9,785	704	317	3,755	9,081
6. Saudi Arabia.....	5,000	1,500			3,500	1,500
7. Import-Export Bank....	577	577	64	96		513
8. Denmark.....	620				620	
Total.....	47,837	30,547	1,154	651	17,290	29,393

Notes:- 1. For miscellaneous development projects.
2. For Amman Municipality; Natural Resources Authority; and the Agricultural Credit Corporation.
3. For highway constructions; Telecommunications Project; Amman Electricity Company; Jordan Electrification Scheme; and Jerusalem Airport.
4. For expansion of Aqaba port and construction of phosphates warehouses.
5. For budget support; Jordan River Tributaries Regional Corporation; Jordan Phosphates Mines Co.; Jerusalem Electricity Company and Jordan Hotels.

6./....

Source: Central Bank of Jordan, Quarterly Bulletin, 1967(3).

1. IBRD, The Economic Development of Jordan, pp. 50-51.

(Notes to Table XII, continued):

6. Highway linking Jordan to Saudi Arabia and highway linking Aqaba to the Southern Dead Sea.
7. For the Holy Land Hotel Company in Jerusalem.
8. For financing purchase of Danish goods and services for development of the dairy industry.

2. Public Expenditure

So far in this part of our study we have been looking at public revenue with only a brief mention being made of public expenditure at the outset when we saw that the total expenditure of the government has averaged the relatively high level of 34 per cent of GDP during 1954-1966 (Table I). While in the foregoing parts we saw the methods by which the government in Jordan was able to raise sufficient revenue to finance its expenditures we shall now turn to examine details of these expenditures. Table XIII gives details of public expenditure during the fiscal years 1954/55 to 1965/66 as divided into two main categories, "current" and "development", with the former in its turn being sub-divided into health and social welfare; education; defence and other current expenditure of the general government.

From these data it can be seen that while total public expenditure increased by about threefold from JD16.6 million in 1954/55 to JD47 million in 1965/66, current expenditure increased by about two and a half times from JD13.9 million in 1954/55 to JD35.8 million

TABLE XIII: Public Expenditure, 1954/55-1965/66 (JD 000)

	1954/55	1955/56	1956/57	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66
A. Current Expenditure												
1. Health and Social Welfare	461	514	582	666	905	1,083	1,152	1,272	1,366	1,434	1,533	1,682
2. Education	991	1,191	1,368	1,648	2,179	2,598	2,613	2,790	3,124	3,413	3,685	4,054
3. Defence and Police	10,216	10,630	13,543	13,421	16,741	21,257	18,425	18,711	19,114	21,021	21,032	21,612
4. Other (total)	2,200	2,537	2,765	3,823	3,698	4,673	4,868	5,446	6,413	7,325	8,202	8,462
Administration & Pensions							1,355	1,703	2,098	2,323	2,863	3,140
Finance & Economics							1,228	1,353	1,519	1,816	1,672	1,567
Communications & Works							1,166	1,257	1,365	1,465	1,750	1,766
Information & Foreign Affairs							610	649	889	1,089	1,189	1,148
Agriculture & Irrigation							509	484	542	632	734	841
Total Current Expenditure	13,868	14,872	18,258	19,558	23,523	29,611	27,058	28,219	30,017	33,193	34,458	25,810
B. Development Expenditure	2,692	2,761	3,063	4,300	5,820	8,560	5,785	4,765	7,509	6,154	9,165	11,178
TOTAL PUBLIC EXPENDITURE (A+B)	16,560	17,633	21,321	23,858	29,343	38,171	32,843	32,984	37,526	39,347	43,623	46,988
					(Percentage Distribution)							
A. Current Expenditure												
1. Health and Social Welfare	2.8	2.9	2.7	2.8	3.1	2.8	3.5	3.9	3.7	3.7	3.5	3.6
2. Education	6.0	6.7	6.4	6.9	7.4	6.8	8.0	8.5	8.3	8.7	8.5	8.6
3. Defence and Police	61.7	60.3	63.5	56.3	57.1	55.7	56.1	56.7	50.9	53.4	46.2	46.0
4. Other (total)	13.3	14.4	13.0	16.0	12.6	12.3	14.8	16.5	17.1	18.6	18.8	18.0
Total Current Expenditure	83.8	84.3	85.6	82.0	80.2	77.6	82.4	85.6	80.0	84.4	79.0	76.2
B. Development Expenditure	16.2	15.7	14.4	18.0	19.8	22.4	17.6	14.4	20.0	15.6	21.0	23.8
TOTAL PUBLIC EXPENDITURE (A+B)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: 1954/55 to 1959/60:- Statistical Yearbook, relevant years; 1960/61 to 1965/66;- Central Bank of Jordan, Quarterly Bulletin, Vol. 2, No. 3 (Amman 1966).

NOTE:- Total expenditure figures differ from those in Table II which are based on the National Accounts calendar-year basis.

in 1965/66 and development expenditure more than quadrupled from JD 2.7 million to JD 11.2 million during these same years. And in this growth, substantial changes occur in the relative importance of the various items. Defence shows a declining relative importance from accounting to nearly two thirds of total expenditure to less than one half. Health and social welfare and education on the other hand show an increasing relative importance with outlays on the former rising from 2.8 per cent to 3.6 per cent and on the latter rising from 6 per cent to 8.6 per cent of total public expenditure during our period (Table XIII). Expenditure on other current items (general administration) increases from 13.3 per cent to 18 per cent of the total and development expenditures increase from 16.3 per cent to 23.3 per cent of total public expnnditure during our period. Thus although defence absorbs the largest part of public expenditure, its relative importance shows a downward trend and in fact even in absolute terms its level shows very slight increase in the latter part of our period. In fact trends here are closely related to trends in the revenue side which we have been previously examining. We have earlier on seen that current foreign transfers to the government expanded very rapidly in the first half of our period (see Table X above), and it is this factor that lay behind the rapid growth of outlays on defence which doubled during this earlier part of our period increasing from about JD 10 million in 1954/55 to JD 21 million in 1959/60. From 1959 onwards (see Table X) these foreign current transfers remain at a stationary level until they show a decline in the closing years of our

period. Expenditure on defence during this latter period shows a roughly stationary level also in absolute terms.

In contrast to trends in this sphere, public revenues both from domestic sources and from foreign sources for development purposes (capital transfers and loans) show a sustained upward trend throughout the years 1954-1966, with the latter item in fact showing most of its growth during the sixties (capital transfers roughly doubled between 1954 and 1959 and then quadrupled between 1959 and 1966: see Table X). Accordingly public expenditure for development purposes and on such items as education and health show a sustained upward trend throughout our period. Development expenditure, in reflection of the rapid growth of foreign capital assistance, thus nearly doubled in the years 1963/64 to 1965/66 (see Table XIII). At this juncture it is perhaps useful to emphasize an important facet of public expenditure during our period, viz., its effect as an engine or generator of growth.

Public expenditure in Jordan during our period has not been a mere redistribution or rechannelling of domestic resources. In fact public expenditure in Jordan has been to a significant extent an external or exogeneus injection of real resources into the economy. While such expenditure averaged about one third of GDP during our period about one half of it was financed through foreign receipts, and thus the injection of real external resources into the economy through the budget has been at a magnitude of about 15 per cent of GDP during our period. Whether such expenditures went to finance development or

recurring expenditures (or merely to finance imports) the channelling of these funds, one way or the other, impinged upon the domestic sectors of the economy. For while we had previously examined the impact and effects of the import surplus on the growth of the economy, it is through the government's budget that a major part of the external resources behind the import surplus was channelled or injected into the economy. The level of this expenditure and its various components relative to the GDP during our period can be seen from the following table (Table XIV).

The heavy weight of expenditure on defence in the government's budgets emerges clearly from this table, where it can be seen that such outlays on defence have been of the order of about one fifth of GDP during our period. This is one of the highest ratios of defence expenditures to GDP to be found amongst both developing and developed countries: it compares with 0.50 per cent of GNP or less in the British colonies and Ceylon, 3.74 per cent in New Zealand and Sweden, 9.49 per cent in France, 9.89 per cent in the U.K. and 13.90 per cent in the U.S.A.[1] However towards the close of our period its level relative to GDP declines substantially in Jordan (in 1965/66 its level of 14 per cent of GDP is about one half of its level of about 24 per cent in 1959/60), but even so it still remains comparable to the highest levels found anywhere in the world.

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1. Alison Martin and W. Arthur Lewis, "Patterns of Public Revenue and Expenditure," Manchester School of Economic and Social Studies, Vol. XXIV (September 1956), pp. 203-232.

TABLE XIV: Public Expenditure as Percentage of GDP, 1954/55-1965/66

Year	Total Expenditure	Development Expenditure	Current Expenditure					
			Health & Social Welfare	Education	Other*	Total (excl. defence)	Defence	Total (incl. defence)
1954/55	31.58	5.13	0.88	1.89	4.19	6.96	19.49	26.45
1955/56	36.82	5.77	1.07	2.49	5.29	8.85	22.20	31.05
1956/57	31.99	4.60	0.87	2.05	4.15	7.07	20.32	27.39
1957/58	34.79	6.27	0.97	2.40	5.58	8.95	19.57	28.52
1958/59	37.62	7.46	1.16	2.79	4.74	8.69	21.47	30.16
1959/60	42.68	9.57	1.21	2.91	5.22	9.34	23.77	33.11
1960/61	36.72	6.47	1.29	2.92	5.44	9.65	20.60	30.25
1961/62	29.75	4.30	1.15	2.52	4.90	8.57	16.88	25.45
1962/63	34.55	6.91	1.26	2.88	5.90	10.04	17.60	27.64
1963/64	33.44	5.23	1.22	2.90	6.23	10.35	17.86	28.21
1964/65	32.19	6.76	1.13	2.72	6.06	9.91	15.52	25.43
1965/66	31.13	7.41	1.11	2.69	5.60	9.41	14.32	23.72
Average 1954/55 to 1965/66 :-		6.32				8.99		

* comprises general administration and various government departments; see Table XIII above.

Source: Based on data in Table XIII above and GDP data elsewhere given.

The total of the other current expenditures (i.e. total current expenditure excluding defence) came to an average of slightly less than one tenth of GDP (8.99 per cent) over the years 1954-1966. This category of expenditures is in fact found to vary only very slightly between various countries and even those with widely differing levels

of per capita income: in the study of Martin and Lewis which we have just cited, the ratio of such category of expenditure to GNP in the international cross-section they examined was found to be on the average very near to one tenth. The median (for the same group of sixteen countries) value of such expenditures was found to be 10.74 per cent of GNP and that of the upper quartile was 13.18 per cent.

As far as the capital expenditure of the government is concerned its average in Jordan during our period stood at 6.32 per cent of GDP. This compares with a median of such expenditures of 4.62 per cent and an upper quartile of 8.23 per cent in the just-cited study. While the participation of the government in capital formation and in the finance of development is examined elsewhere in our study,[1] the present data help emphasize that the large share of defence expenditures in the budget did not result in a reduction of the other expenditures of the government to a "below-average" level, if one can use this term. This was achieved through the rôle of foreign transfers (grants-in-aid to the budget) in financing such a high level of defence expenditure. To be sure, even such expenditures as those on defence should be borne in mind in considering the effect of the import surplus on the growth of the economy: although no details are available (obviously) for such expenditures on defence, a sizeable

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1. Government's rôle in capital formation and in the finance of development is examined in Chapter III, Part I, and in Chapter VIII.

part of them went through the domestic channels of economic activity to affect the growth of the economy in the way we had earlier on outlined, e.g. salaries of members of the armed forces represented a sizeable addition to aggregate demand thus enhancing the growth of the economy along patterns already outlined.

CHAPTER VIII

CHAPTER VIII

THE FINANCE OF DEVELOPMENT

(1) Sources of Saving

This part of our study examines the financing of the capital formation that accompanied the development of the Jordan economy during our period. We start by examining the sources of finance as divided into two broad categories: domestic and foreign. (Table I).

The presentation of the data in this form brings out the extent of the dependence of the economy on external resources. However, the components of these concepts of "domestic saving" and "foreign saving" are of importance for revealing factors behind the trends in these aggregates (Table II). As mentioned in our notes to Table I, our presentation of the data differs from that of the National Accounts of Jordan in so far as we exclude current transfers from abroad from the current receipts of the private and public sectors in calculating their saving. This we do to bring the presentation in line with that normally employed: in fact the National Accounts depart from the normally employed method of classification because both the private and the public sectors in Jordan receive a special type of transfers from abroad which go directly to finance the consumption expenditures of both sectors. Such foreign transfers could

TABLE I: Domestic and Foreign Saving and their Ratios to Gross Domestic Capital Formation, 1954-1966

Year	Gross Domestic Capital Formation	Gross Domestic Saving*		Foreign Saving‡	
	JDm.	JDm.	% of GCDF	JDm.	% of GDCF
1954	5.90	- 2.80	- 47	8.70	147
1955	5.10	- 7.60	-149	12.70	249
1956	13.70	3.80	28	9.90	72
1957	9.30	- 4.50	- 48	13.80	148
1958	9.20	-11.50	-125	20.70	225
1959	12.57	-13.47	-107	26.04	207
1960	17.09	- 9.85	- 58	26.94	158
1961	18.92	- 3.82	- 20	22.74	120
1962	20.22	- 0.62	- 3	20.85	103
1963	20.00	-12.30	- 62	32.30	162
1964	25.29	4.79	19	20.50	81
1965	27.79	5.50	20	22.29	80
1966	28.09	- 3.20	- 11	31.29	111
1954-1966:			- 26		126

* gross domestic saving is the difference between the current receipts and expenditures of the private and public sectors. Transfers to and from abroad (other than net factor income) are excluded. The National Accounts, however, include current transfers from abroad in the receipts of both sectors; only foreign capital transfers are excluded in the National Accounts presentation. Figures here represent gross saving (i.e. no account is made for depreciation) and a negative figure represents an excess of current expenditures over receipts.

‡ foreign saving is the excess of payments for imports of goods and services over receipts from exports of goods and services. Transfers to and from abroad (other than factor income payments) are excluded.

Source: R.S. Porter, op. cit., pp. 8, 9, 11; The National Accounts 1959-1966, pp. 15, 16, 18,20.

be logically included (as the National Accounts do) in the current receipts of both sectors as such transfers, in the first place, result in the expenditures which they are earmarked to finance.

As can be seen from Table II, the private and public sectors have been receiving current transfers from abroad throughout the period 1954-1966 (items 1(b) and 2(b)). Current transfers from abroad going to the private sector have remained at a roughly unchanged level throughout the period and their main component is the value of relief goods distributed by the United Nations Relief and Works Agency (UNRWA) to the Palestine refugees in Jordan. In addition to such relief goods from UNRWA, they include the value of foodstuffs shipped to Jordan from the U.S.A. under PL480 Title 3 agreement for free distribution to needy people and under PL480 Title 2 agreement for free distribution and not for sale. Besides such relief goods which go in the first place to consumption, these current transfers to the private sector include emigrants' remittances,[1] pensions received by Jordanians who were previously employed by the Palestine Government under the Mandate and donations of various charitable institutions. As already mentioned, the value of relief goods distributed by UNRWA constitutes the major part of these total current transfers to the private sector from abroad, and thus they can be viewed as going to

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1. These refer to transfers from Jordanians permanently resident abroad. Transfers from Jordanians temporarily abroad are included under Factor Income payments.

TABLE II: Finance of Gross Domestic Capital Formation, 1954-1966

(JDm.)

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
1. Private Sector:													
(a) Saving	3.80	-0.90	12.10	5.80	3.70	-1.66	2.61	8.79	7.45	1.17	15.51	15.27	3.59
(b) Foreign Current Receipts	4.20	4.20	4.20	4.20	4.20	4.36	4.38	3.89	3.61	4.25	3.86	4.29	4.21
(c) Current Surplus	8.00	3.30	16.30	10.00	7.90	2.70	6.99	12.68	11.06	5.42	19.37	19.56	7.80
2. Public Sector:													
(a) Saving	-6.60	-6.70	-8.30	-10.30	-15.20	-11.81	-12.46	-12.61	-8.08	-13.47	-10.72	-9.77	-6.79
(b) Foreign Current Receipts	5.20	5.90	7.30	10.20	17.10	16.69	16.52	16.52	15.39	13.28	19.51	11.83	12.39
(c) Current Surplus	-1.40	-0.80	-1.00	-0.10	1.90	4.88	4.06	3.91	7.31	-0.19	8.79	2.06	5.60
3. Total Current Surplus of Private and Public Sectors (1c + 2c)	6.60	2.50	15.30	9.90	9.80	7.58	11.05	16.59	18.37	5.23	28.16	21.62	13.40
4. Foreign Lending (Net):													
(a) to Private Sector	-	-	0.30	0.50	0.60	0.11	0.42	0.46	0.97	0.89	0.26	0.25	0.30
(b) to Public Sector	1.30	1.30	1.90	-0.60	1.00	0.50	1.50	0.50	1.56	0.47	0.95	2.34	4.91
5. Foreign Capital Transfers to Public Sector	2.40	3.90	0.60	2.00	2.00	2.62	3.67	2.74	2.82	3.17	6.29	8.64	11.40
6. Changes in Foreign Assets (increase: '-')	-4.00	-2.40	-4.10	-1.70	-3.90	1.26	-0.68	-1.61	-1.99	6.22	-17.06	-6.21	-8.87
7. Net Errors and Omissions	-0.40	-0.20	-0.30	-0.80	-0.30	0.50	1.13	0.24	-1.51	4.02	6.69	1.15	6.95
8. Finance of Gross Domestic Capital Formation	5.90	5.10	13.70	9.30	9.20	12.57	17.09	18.92	20.22	20.00	25.29	27.79	28.09

Source: Same as Table I.

finance consumption in the first place. The inclusion of the total of this item in the current receipts of the private sector would result in a different figure for private saving as defined in the National Accounts and which is shown as item 1(c) in Table II.

As far as current transfers from abroad to the public sector are concerned,[1] these similarly have been going in the first place to finance the consumption expenditure of the government. These transfers represent non-repayable budget support received by the Jordan government from the U.K. and U.S.A. governments which is included in the government's accounts "above the line" and thus could be included in the current receipts of the public sector in calculating government's saving as is done in the National Accounts. Such a classification would yield a figure for government saving as shown by item 2(c) in Table II which is the figure presented by the National Accounts as government saving.

The remaining items in Table II represent details of the other foreign resources that have been transferred to the country during 1954-1966. The major item amongst these has been foreign capital transfers to the public sector which have expanded especially rapidly towards the end of our period. This item represents non-repayable foreign assistance (either in cash or in kind) received by the Jordan

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1. These current transfers, in addition to other foreign transfers to the government, are examined in detail in that part of the thesis dealing with Public Finance and the foreign revenue of the government.

government, for the finance of specific development expenditures, mainly from the U.S.A., but also from West Germany and various Arab countries. Second in importance to this item comes foreign loans to the government (item 4(b) in Table II) which are shown net, i.e. less repayments. These comprise all loans received by the Jordan government or any of its agencies, e.g. Municipalities and Aqaba Port Authority. Loans to the private sector (item 4(a), Table II) have not had the same weight as the other two types of official capital transfers: this item comprises loans from the U.S. Development Loan Fund, from the Import-Export Bank in addition to other loans for development in the private sector and remittances of private capital to Jordan. This item is given net, i.e. less repayments.

The total of all the above items represents the total foreign resources that have been put at the disposal of the economy. In many years, especially in the sixties as will be noted below, these foreign transfers have tended to exceed the excess of imports over exports including factor payments (i.e. foreign saving) and have thus gone to add to the foreign assets of the country. This change in foreign assets is indicated by item 6 in Table II, and as this figure is known, item 7 in the same table (errors and omissions) is inserted as a balancing item to arrive at total saving which is equal to gross domestic capital formation.

The concept of "foreign saving" adopted in Table I reveals the heavy dependence of the economy on foreign resources. In fact the

total external resources thus supplied to the country have exceeded by 26 per cent the total capital formation that occurred during 1954-1966 (see Table I), with this excess representing the dis-saving of the private and public sectors over these years. In the earlier part of our period, foreign saving has tended to grow more rapidly than the growth of total production in the economy: in the six years during 1954-1960 the level of foreign saving increased by about threefold from about JD 9 million in 1954 to about JD 27 million in 1960, and their percentage ratio to GDP nearly doubled from about 17 per cent in 1954 to about 31 per cent in 1959 (Table III). Gross domestic capital formation during that period increased at quite a rapid rate with its level also about trebling in absolute terms from JD 19 million in 1961, and its percentage ratio to GDP increased from about 13 per cent in 1954-1956 to about 18 per cent in 1960-62 (see Table III).

While thus in the earlier part of our period both capital formation and the level of foreign saving have increased substantially both absolutely and relative to GDP, in the latter part of our period capital formation as a percentage of GDP remains at roughly the same level, and foreign saving as a percentage of GDP tends to decline from its peak of 1959-1960. As far as domestic saving is concerned, the level of dis-saving shows a tendency to decline, both in absolute terms and as a percentage of GDP, in the latter part of our period as compared with earlier on.

TABLE III: Levels of Capital Formation and of Domestic and Foreign Saving, 1954-1966 (% of GDP)

Year	Gross Domestic Capital Formation	Domestic Saving	Foreign Saving
1954	11.3	- 5.3	16.6
1955	10.6	-15.9	26.5
1956	20.6	5.7	14.9
1957	13.6	- 8.6	20.2
1958	11.8	-14.7	26.5
1959	14.8	-15.8	30.6
1960	19.1	-11.0	30.1
1961	17.1	- 3.5	20.5
1962	18.6	- 0.6	19.2
1963	17.0	-10.5	27.5
1964	18.7	3.5	15.1
1965	18.4	3.6	14.8
1966	18.8	- 2.1	20.9
1954-1966:	16.9	- 4.4	21.3

Source: Calculated from data in Table I, and from GDP data given in Chapter III.

So far we have seen the extent of the dependence of the economy on external resources (i.e. foreign saving) and the level of domestic saving or rather dis-saving. Changes in foreign saving (or in other words trends in the excess of imports of goods and services over exports of goods and services including factor income) are traced elsewhere in the thesis through trends in the relevant variables:

foreign assistance and public finance; monetary trends; and foreign trade. While foreign transfers to the government expanded tremendously in the earlier part of our period (from about JD 8 million in 1954 to JD 22 million in 1960) imports increased very rapidly (imports of goods and services more than doubled from about JD 20 million in the same period to JD 47 million). In contrast in the sixties while the foreign receipts of the government increase less rapidly (from about JD 22 million in 1960 to JD 29 million in 1966) imports grow at a reduced rate (from JD 47 million in 1960 to JD 77 million in 1966) not only as a result of the reduced growth in aid but also as a result of a much more rapid growth of import substitution and food production (agricultural output more than doubled in the sixties in contrast to its stationary level in the fifties). These trends coupled with a faster growth of exports in the sixties not only prevented the gap represented by foreign saving from continuing its expansion but actually managed to reduce its size from the peak level it attained in 1959-1960 (see Tables I and III), and the foreign assets of the country grow more rapidly now than in comparison with the fifties.

Having briefly examined factors behind changes in foreign saving (as mentioned, these factors are themselves examined in detail in appropriate parts of the thesis) let us proceed now to examine factors behind changes in domestic saving during our period.

Domestic Saving. - We have already seen that gross domestic saving has been negative (i.e. reflecting an excess of current expenditure over revenue) in nearly every year during 1954-1966. During the period as a whole domestic dis-saving has equalled about a quarter of GDCF (see Table I), but, as further details would reveal, most of this dis-saving occurred in the public sector where outgoings have persistently exceeded incomings (that is excluding external transfers).

TABLE IV: Level of Gross Domestic Saving: Private and Public 1954-1966

Year	Private Saving		Government Saving		Gross Domestic Saving	
	JDm.	% of GDP	JDm.	% of GDP	JDm.	% of GDP
1954	3.80	7.3	- 6.60	-12.6	- 2.80	- 5.3
1955	- 0.90	- 1.9	- 6.70	-14.0	- 7.60	-15.9
1956	12.10	18.2	- 8.30	-12.5	3.80	5.7
1957	5.80	8.5	-10.30	-17.1	- 4.50	- 8.6
1958	3.70	4.8	-15.20	-19.5	-11.50	-14.7
1959	- 1.66	- 2.0	-11.81	-13.8	-13.47	-15.8
1960	2.61	2.9	-12.46	-13.9	- 9.85	-11.0
1961	8.79	7.9	-12.61	-11.4	- 3.82	- 3.5
1962	7.45	6.9	- 8.08	- 7.5	- 0.62	- 0.6
1963	1.17	1.0	-13.47	-11.5	-12.30	-10.5
1964	15.51	11.4	-10.72	- 7.9	4.79	3.5
1965	15.27	10.1	- 9.77	- 6.5	5.50	3.6
1966	3.59	2.4	- 6.79	- 4.5	- 3.20	- 2.1
1954-1966:		6.1		-10.5		- 4.4

Source: Table II. Concepts the same as Table I above.

Here one can see that negative saving during our period results from the dis-saving of the government (i.e. from the excess of current expenditure of the government over its "domestic receipts"). Over the period 1954-1966 as a whole, this excess current expenditure of the government has been to the order of about one tenth of GDP and, with private saving coming to 6 per cent of GDP, has resulted in a domestic dis-saving level of about 4 per cent of GDP over these years (see Table IV). Government saving was examined separately in the relevant part of the thesis dealing with public revenue and expenditure, and thus we turn at this juncture to examine private saving.

The concept employed here for examining private saving differs from that previously employed in so far as we here include current transfers from abroad in the accounts of the private sector while previously we had excluded them. The reason for this change is that while previously we were examining the sources of finance of capital formation as divided into domestic and foreign and therefore it followed that foreign transfers should be excluded in measuring this dependence on external resources, what we are now interested in is the saving behaviour of the private sector. It becomes therefore more appropriate to include foreign transfers in the current receipts of the private sector especially when we remember that such foreign transfers represent mainly international relief for the maintenance of the refugee population: in fact throughout 1954-1966 such current transfers from abroad have been maintained at a roughly constant level

of about JD 4 million per annum (see Table II).

TABLE V: Private Disposable Income, Private Consumption and Private Saving 1959-1966

Year	Total Private Current Income *	Direct Taxes and Current Transfers to Gov't.	Disposable Income ‡	Private Consumption Expenditure		Private Saving	
	JDm.	JDm.	JDm.	JDm.	% of Disposable Income	JDm.	% of Disposable Income
1959	93.63	3.84	89.79	87.09	97	2.70	3
1960	99.48	4.04	95.44	88.45	93	6.99	7
1961	120.11	4.67	115.44	102.76	90	12.68	10
1962	118.05	4.63	113.42	102.36	90	11.05	10
1963	127.59	5.35	122.24	116.82	96	5.42	4
1964	148.88	6.04	142.84	123.47	86	19.37	14
1965	165.19	7.59	157.60	138.04	88	19.56	12
1966	165.17	7.76	157.41	149.61	95	7.80	5
1959-1966:			994.17	908.60	91	85.57	9

* total private current income comprises income from employment and property of the private sector; current transfers from government and current transfers from abroad.

‡ disposable income is equal to total private current income less direct taxes and current transfers to the government.

Source: National Accounts 1959-1966, p. 16.

We saw in Table IV that the saving of the private sector over the period 1954-1966 comes to about 6 per cent of GDP, and in Table V we can see that this level of saving represents 9 per cent of the

disposable income of the private sector over these years. In this respect Jordan is in a position similar to that found in the developing countries generally where the bulk of domestic saving comes from the private sector, with public current expenditures chasing closely public current revenues and thus leaving little or no surpluses (in some cases like Jordan, Israel, Korea, Vietnam, leaving deficits) on their current accounts (see Table VI). Even if in our case in Jordan we include current transfers from abroad in the current receipts of the public sector then government surpluses on current account over the period under review come nowhere near the level of the comparable saving of the private sector on current account (compare items 1(c) and 2(c) in Table II).

Thus it can be readily seen from the available data that domestic saving is mainly derived from the private sector which in addition has been mainly responsible for whatever increases have occurred in the rates of saving in the developing countries in recent years. Perhaps it ought to be stressed at this juncture that in examining saving performance in a developing country, not only is the saving level of importance, but of no less importance is their type, or the framework within which such saving is undertaken. Thus great importance is attached to the saving of business, or profit-motivated, enterprises whose saving tends to be more readily channelled into the needed type of capital formation than that of private individuals in a developing country. The available details contained in Table VI

TABLE VI: Developing Countries: Level of Domestic Saving by Sector, Average 1962-1964 * (percentage of GDP)

Country ‡	Gross Domestic Saving	Net Domestic Saving	Government Saving	Private Saving		
				Total	Corporate x	Household
Venezuela	23	13	9	4	2	3
Federation of Malaya	20	15	6	9		
Trinidad and Tobago	19	9	3	7	1	6
Burma	18	12	2	10		
Rhodesia and Nyasaland	18	12	2	9	4	5
China (Taiwan)	18	11	...	11		
Colombia	16	6	2	4	3	2
Jamaica	15	8	2	6	5	1
Philippines	15	9	1	8	3	5
Ecuador	14	9	5	4	3	1
India		10	1	8		
Uruguay	13	10	...	10	1	9
Honduras	12	7	...	8	2	5
Chile	11	3	3	1	3	-4
Costa Rica	10	5	1	4	1	3
Bolivia	9	3	...	3	1	2
Guatemala	8	4	2	2		
Panama	8	3	1	2	6	-4
Israel	8	-1	-1	...		
Republic of Korea	6	1	-1	2	3	-1
Jordan	-3	-8	-9	6		
Republic of Viet-Nam	-4	-9	-9	...	2	-2

(...) indicates that the amount is nil or negligible; blank space indicates data not available.

* minor differences in time periods and concepts exist. See source for details.

‡ countries are arranged in descending order of gross domestic saving ratio.

x includes saving of public and private corporations.

Source: U.N., World Economic Survey 1965, Part I, New York 1966, p. 30. Data for Jordan obtained from our own data previously presented. To arrive at net domestic saving a depreciation rate of 5% of GDP is used. This is obtained from our data in Chapter 3, p.99

show the importance of the saving of the corporate business sector, which in a number of countries has been the largest source of domestic saving, bearing in mind that a major part of the business sectors in developing countries is in the form of unincorporated enterprises. No such details are available in the case of Jordan but as we shall presently see in our examination of the process of mobilizing savings in Jordan in recent years these two facets of the saving of the private sector are closely interconnected: while the development of such profit-motivated enterprises (and other types of necessary institutions) tends to increase this type of business saving, this development itself tends simultaneously to stimulate the saving function of individuals and help convert "hoardings" into "saving" and thus mobilize additional finance for capital formation.

(2) The Mobilization of Saving

So far we have examined the sources and level of saving during the years 1954-1966. What we want now to turn to is the mobilization of saving: taxation, the banking system, special credit institutions, corporate bodies and specific policy measures have all had their effect in determining the supply of finance during our period, and we shall now proceed to examine these important aspects of the finance of development.

(a) Taxation. - The level and components of taxation during our period have been already examined in the part dealing with public

finance. Two points are worth stressing in dealing with taxation and saving: the first point, which is only obvious, is that although taxation is a device which can increase the resources at the disposal of the government, it does not follow that such resources will go to finance investment but, indeed as recent experience in the developing countries tends to indicate, such additional public revenues can be utilized to finance consumption expenditures of the government which have been very rapidly rising over recent years in the developing countries generally. The available data (Table VII) indicate that while the share of the government in the GDP has recently shown a general tendency to increase in the developing countries, the consumption expenditures of governments have tended to rise even more rapidly thus resulting in numerous cases in a decline of government saving in relation to GDP.

Thus while in fifteen out of the twenty-one developing countries listed in Table VII the government share in GDP (i.e. its disposable income) increased or remained unchanged, in only seven countries did government saving show any increase relative to GDP. With the increased demands imposed upon governments' revenue for an increased range of consumption expenditures, not all increases in the governments' collection of revenue in the developing countries have thus, as has been erroneously assumed, gone to finance capital formation.

The second point to be stressed concerns the possible effects of taxation on private saving. Two points ought to be borne in mind

TABLE VII: Developing Countries: Changes in levels of Government Saving, Consumption and Disposable income 1953-55 and 1962-64 and their Levels in 1962-64 * (percentage of GDP)

Country ‡	Changes: 1953-55 and 1962-64			Levels 1962 - 64		
	Net Saving	Con-sump-tion	Dispos-able Income	Net Saving	Con-sump-tion	Dispos-able Income
Jordan	+4	...	+4	-9	25	16
Israel	+2	+2	+5	-1	21	20
Republic of Korea	+2	+2	+5	-1	13	12
Chile	+2	...	+2	3	10	13
Ecuador	+2	...	+2	5	13	18
Trinidad and Tobago	+1	-1	-1	3	11	13
Jamaica	+1	+2	+2	2	10	13
India	...	+2	+2	1	9	10
Philippines	...	+2	+2	1	10	11
Mauritius	...	+2	+2			
Panama	-1	+1	...	1	12	13
China (Taiwan)	-1	...	-1	...	17	17
Honduras	-2	+2	...	...	9	9
Guatemala	-2	+1	-1	2	7	9
Colombia	-2	...	-2	2	7	9
Uruguay	-3	+3	...	...	13	12
Rhodesia and Nyasaland	-3	+4	+1	2	13	15
Costa Rica	-3	+4	...	1	13	14
Ghana	-4	+3	-1	...	11	11
Barbados	-4	+4	...			
Burma	-5	+3	-2	2	13	15

* minor differences in time period and coverage exist: see source for details.

‡ countries arranged in descending order of change in percentage of net savings to GDP.

Source: U.N., World Economic Survey 1965, pp. 23-24. Part of the data for Jordan from data already given.

in this connection in the case of Jordan: firstly the availability of external sources of revenue to the government has meant that not all the expenditures of the government had to be financed through the collection of revenue from the various sectors of the economy or indeed through budget deficits which are considered to have an adverse effect on private saving through the inflationary pressures in which they result in the developing countries. Secondly, the components of taxation in Jordan have been such that minor reliance was placed upon direct taxes on income and wealth with heavy reliance being placed upon import duties. These two points relating to taxation help indicate the absence of any adverse effects on private saving as far as public revenue was concerned, and especially when we keep in mind the monetary stability which the economy has enjoyed throughout our period. Thus in the sphere of taxation (and the related sphere of price stability) we have seen some factors, or rather their absence, that have been behind the supply of finance during our period. We shall now turn to other factors which have been affecting in a more positive way the mobilization of saving during these years.

(b) Commercial Banks. - In assessing the rôle of the commercial banks in mobilizing development finance one ought perhaps to bear in mind that it is not the function of such institutions to provide the risk-capital necessary for development. This is not to say that the commercial banks should not or do not contribute to the finance of investment of a developmental type, but that other types of institutions

are necessary to deal primarily with this aspect of economic development. However, the commercial banks in a developing country play an invaluable rôle in channelling short-term funds between savers and investors, and such a rôle has been especially important in the case of Jordan where commercial and trading activities (which traditionally represent the main sectors receiving banks' finance) have contributed substantially to the growth of income in recent years. Details of commercial banks' assets and liabilities during our period indicate a tremendous expansion of banking activity whereby their total deposits and the total credits have each increased by about fivefold over the years 1954-1966 (see Table VIII). The most interesting part of the data for our purposes is that relating to the growth of private time and saving deposits which show an increase of more than fifteenfold in their magnitude from JD1.2 million in 1954 to JD19.6 million in 1966. The potential for development finance in this sphere is indicated by the continued increase in such private time deposits even after they had attained a relatively high level: having reached a level of about JD10 million in 1964 they doubled again to about JD20 million in the two years to 1966.

The conservative policy of the commercial banks during our period is indicated by the fact that even in the absence of any public regulations or control their cash ratio has been over 50 per cent and did not fall below that level except in the closing years of our period

TABLE VIII: Deposits and Credits of Commercial Banks, 1954-1966

(JDm.)

End of Year	Total Deposits	Private Time Deposits	Loans and Advances to Private Sector	Bills Discounted	Total Credits
1954	12.1	1.2	3.7	1.2	5.5
1955	16.4	1.7	5.0	1.5	7.6
1956	17.2	2.5	6.0	1.5	8.2
1957	20.2	3.2	7.8	2.2	11.0
1958	23.2	3.3	7.5	2.7	11.1
1959	25.4	4.0	8.8	3.5	13.6
1960	29.0	4.2	11.1	4.7	16.8
1961	33.0	5.6	12.7	5.4	18.7
1962	41.0	8.7	14.2	6.1	21.3
1963	37.5	9.9	17.9	7.0	25.8
1964	52.3	10.2	20.7	8.5	29.3
1965	48.5	16.5	22.0	9.3	33.3
1966	55.8	19.6	26.4	9.8	39.0

Source: Statistical Yearbook, relevant years.

when it came down to around 40 per cent.[1] And what is of further interest is that most of these reserves have been held in the form of foreign assets of various types until 1965 when the Central Bank authorities took steps to direct the commercial banks to deposit their

1. See Table XXXIII, Chapter III, Part II (dealing with monetary developments). See this part of our study for details about further trends in commercial banks assets and liabilities.

foreign assets with the Central Bank. These foreign assets in addition to the currency cover represent a substantial potential of capital funds for financing development and Jordan finds itself in this respect in a similar position to many of the British colonies that have emerged into independence with currency systems known as the sterling exchange standard. Throughout our period, full convertibility upon demand, and a 100 per cent gold and foreign exchange cover, have been maintained as the foundations of the currency system thus rendering it in many respects similar to the currency systems of the overseas territories of the British Commonwealth, especially in the earlier part of our period when the Jordan Currency Board funds were exclusively invested in London. While the monetary system and monetary developments are examined elsewhere in our thesis, what is of interest to this part of our study is the possibility of utilizing monetary policy in a more positive way for the purposes of development. Edward Nevin in his Capital Funds in Underdeveloped Countries[1] has analysed extensively the potentials (and dangers) that such monetary systems provide for assisting the process of development. However, as he stresses, this provides no panacea for development finance but, if properly managed, can provide additional help for development.

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1. Edward Nevin, Capital Funds in Underdeveloped Countries (London 1963), especially Chapter I dealing with the "Currency System", known as the sterling exchange standard which is the system that prevails in Jordan.

To return to the question of commercial banking during our period, the "conservative" features of banking during our period stem in fact from the currency system adopted and the passive monetary management concerned primarily (if not only) with the issue of currency. The establishment of the Central Bank in the latter part of our period left this system essentially unchanged. As Nevin stresses, one possible feature of the sterling exchange standard currency systems is that the foreign assets of such countries might greatly exceed the currency issue,[1] and in Jordan the foreign assets of the commercial banks represent one such "excess" of unessential holdings of valuable foreign currency.[2] However future policy in Jordan in this regard is perhaps indicated by the steps taken by the Central Bank, as just mentioned, to divert such foreign assets from the unofficial financial institutions to itself. Such funds can be safely utilized in the finance of development without endangering the monetary stability of the economy.

The following figures help indicate the concentration of banking operations in the finance of commercial and trade activities. More than one half of commercial banks' total credit was provided to the trade sector even as late as the closing years of our period.

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1. Ibid., p. 18, where it is stated that the Currency Funds amounted to only 28% of the sterling balances of the British colonies at mid-1960.

2. The commercial banks' foreign assets in Jordan represented between 1957 and 1965 (when most of these funds were moved to the Central Bank) about 50% of the total foreign assets of the country. See Chapter III, Part II, Table XXXIII.

Credits advanced to industry however have been gaining in importance. Indeed, as was noted earlier on, it ought to be stressed that the finance of development in such sectors as agriculture or industry should not be expected to come from commercial banks, but rather from specialized institutions whose functions are to deal with this type of finance. The indirect help that commercial banks can most easily provide in this respect is (as illustrated by the participation of banks in Jordan in the shareholding of the Industrial Development Bank which will be presently discussed) through the launching of such financial institutions.

TABLE IX: Sectoral Distribution of Commercial Banks Credit, 1964-1966 (JD000)

Sector	1964	1965	1966
Municipalities and Public Corporations	1,610	2,064	2,579
Agriculture	860	678	613
Mining	223	12	30
Industry	3,326	4,321	4,723
Commerce and Trade	14,408	17,075	20,335
Construction	1,813	1,711	2,371
Transportation	2,590	2,326	2,146
Tourism, Hotels and Restaurants	809	953	993
Financial Institutions	226	143	330
Professional and Private Individuals	1,466	1,700	2,247
Purchase of Land and Buildings	430	740	896
Other	1,513	1,576	1,726
Total	29,274	33,299	38.989

Source: Central Bank of Jordan, Quarterly Bulletin, Volume 1, No. 2, p. 24, and Volume 2, No. 3, p. 29.

Having seen the position of commercial banking in Jordan regarding the finance of development we next turn our attention to examine the other financial institutions that have emerged during our period.

(c) Specialized Credit Institutions. - One of the main obstacles confronting the poor countries in their economic development is not only a low level of saving but also the absence of channels through which whatever saving may occur can be mobilized into the capital formation required for development rather than passively spilling into unproductive investments (e.g. real estate or jewellery) which are characteristic of the developing countries. The development of such channels in the form of suitable institutions is in fact an integral part of the development process itself. Three such institutions have evolved in Jordan during our period with a fourth appearing at the close of the period, and the data below (Table X) reveal the finance which they have provided for investment in the various sectors of the economy.

These institutions were established by the government with foreign financial assistance which has taken the form of loans or grants to augment the resources of these institutions, or loans for specific projects but through the framework of the institution concerned. The Agricultural Credit Corporation (ACC) activities are examined in the part of our thesis dealing with the agricultural sector. The Municipal Loan Fund was established in 1957 to assist municipalities

TABLE X: Specialized Credit Institutions: Loans Disbursed 1958-1966 (JD000)

Year	Industrial Development Bank	Agricultural Credit Corporation	Municipal Loan Fund	Housing Agency	Total
1958	125		408		533
1959	48		169		217
1960	60	452	351		863
1961	115	467	500		1,082
1962	192	693	642		1,427
1963	87	804	321		1,212
1964	80	527	471		1,078
1965	72	1,173	458		1,703
1966	484	1,537	253	137	2,411

Source: Central Bank of Jordan, Quarterly Bulletin, Volume 1, No. 2, pp. 27-29 and Volume 2, No. 3, pp. 34-37.

in financing the development of the public utilities for which they are responsible. The Housing Agency was established in 1966 to assist in the financing of civil servants' housing. The major part of the total funds provided by these four institutions came from the ACC and the Industrial Development Bank (IDB), and while the activities of the ACC are examined elsewhere we shall now look at the activities of the IDB.

The IDB originated in the form of the Industrial Development Fund which was created in 1957 in cooperation with the United States Operation Mission in Jordan. The limited total resources of this fund

(about half a million Dinars only) meant that it soon became a revolving fund with the amount of loans extended being determined by loan repayments, and in 1965 the IDB was established[1] and took over the functions and resources of the Fund. This step undertaken in 1965 was the first of its kind in Jordan where an institution was set up not only to channel official resources into investments, but also to attract private savings and to utilize them in extending medium- and long-term credit for industrial development. The authorized capital of IDB totalled JD 3 million divided into three million shares of JD 1 each. One million of these shares were Ordinary shares subscribed by the government through transferring the assets of the Industrial Development Fund (JD 576,708) to IDB with the balance being paid in three half-yearly instalments starting from the date of establishment of the Bank. The remaining two million shares are Preference Shares owned by the private sector exclusively and carry a minimum guaranteed dividend of 6 per cent annually. The extent of the potential development finance that can be mobilized from private savings in this way is indicated by the over-subscription which occurred in respect of the first one million Preference Shares to which the public was invited to subscribe. In fact 1,241,717 Preference Shares were subscribed to and it was decided to allot part of the other one million Preference Shares to meet this over-subscription. And while the total number of shareholders came to 871,

1. The IDB was set up under Law No. 27 of 1965.

those who owned between 1 and 500 shares were 779 thus reflecting the contribution of small savers to financing operations of this type. In addition, commercial banks participated in this subscription to Preference Shares.[1]

The Bank extends credit not only to manufacturing industry but also to tourism, and in the first year of its operation over one third of the value of loans approved went to finance development in the tourism sector. And its objectives as set out by its law are not confined to mobilizing domestic saving but also to attract foreign financial resources both private and official and in this respect it has provided an interesting instance of mobilizing regional resources in the form of loans to specific projects being channelled through IDB. A loan amounting to KD 0.5 million was granted to IDB by the Kuwait Fund for Arab Economic Development during 1964-1965 for two specific projects in the tourism sector and another project for electric generation. This loan was granted under three separate agreements[2] each relating to the project concerned: an agreement for the Jerusalem Power Project for KD 240,000 at an interest rate of 3 per cent per annum to be re-lent to the Electricity Company of Jerusalem at a rate of 3½ per cent per annum; an agreement for the

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1. Industrial Development Bank, Second Annual Report (Amman 1966), pp. 12-13.

2. The three agreements between the Hashemite Kingdom of Jordan and the Kuwait Fund for Arab Economic Development were sub-titled: the Jerusalem Power Project, dated February 5, 1964; the Jerusalem Hotel Project, February 5, 1964; and Al-Urdan Hotel Project, dated March 8, 1965.

Jerusalem Hotel project for KD175,000 at a rate of interest of 4 per cent per annum; and an agreement for the Al-Urdan Hotel Project in Amman for KD85,000 at an interest rate of 3½ per cent per annum to be re-lent by IDB to the Jordan Hotels and Tourism Company at a rate of 4 per cent per annum.

While, as already stated, the establishment of IDB represented the first step in creating an institution concerned amongst other things with mobilizing the saving of the private sector for investment in development projects, the government has taken other specific measures which have proved successful in mobilizing domestic saving and in creating institutions the activities of which are concerned with development. This relates to the finance and development of joint-stock companies in the manufacturing and other sectors of the economy which was greatly assisted by government policy in this respect.

(d) The Finance of Joint-Stock Industrial Companies. - The absence of credit facilities for industrial development prompted the government to participate directly in the shareholding of the major industrial enterprises that were launched during our period. The aim of the government here was not to supplant but rather to complement and assist the private sector in developing the industrial sectors of the economy, for although the participating of the government in these enterprises was extensive (about 29 per cent of their total paid-up capital: see Table XI) the government did not attempt to administer

TABLE XI: Government Shareholding in Local Joint-stock Companies 1966 (JD 000)

Company	Nominal Capital	Paid Up Capital			
		Government	Private	FOreign	Total
1. Jordan Cement Co.	3,000	1,485	1,460	55	3,000
2. " Petroleum Refinery	4,000	250	3,398	352	4,000
3. " Phosphate Mines Co.	3,000	1,026	932	42	2,000
4. Vegetable Oil Refinery	500	179	265		444
5. Arab Pharmaceuticals Co.	250	55	164	23	242
6. Jordan Paper Industries Co.	650	300	177	18	395
7. " Tanning Co.	400	100	287	3	390
8. Arab Potash Co.	4,501	500	1,735	763	2,999
9. I.C.A. Co.	1,000	29	611	115	755
10. Jordan Confectionary Co.	150	10	142		152
11. " Woollen Cloth Co.	325	110	292	2	304
12. " Hotels and Tourism Co.	723	620	103		723
13. Holy Land Hotel Co.	600	500	6		506
14. Hamman Minerals Co.	50	15	12		27
15. Alia/Jordanian Airlines Co.	1,000	500	124	39	664
16. Amman Bus Transport Co.	650	100	550		650
17. Jordan Tourist Transport Co.	300	25	28		53
18. Ajlun District Electricity	1,000	165	420	5	590
19. Jordan Electricity Co.	2,500	60	1,994	163	2,217
20. Jordan Fisheries Co.	100	16	29	25	61
Total:	24,626	5,746	12,728	1,597	20,071
Percentage of Total Paid-up Capital:		29%	63%	8%	100%

Source: Ministry of National Economy (privately obtained).

or operate these projects itself, this function being left to the private sector. By 1966 the government had participated in twenty joint-stock companies: eleven of them being manufacturing enterprises which represented the largest establishments operating in this sector; three concerned with tourism, three concerned with transportation; two concerned with electric generation and one fishery enterprise (see Table XI). Out of a total paid-up capital of about JD 20 million the government had subscribed about JD 5.7 million representing about 29 per cent of the total paid-up capital. Foreign shareholders held another 8 per cent of the total paid-up capital and the private sector contributed the remaining 63 per cent amounting to JD 12.7 million.

The effectiveness of this policy in mobilizing additional savings and especially small-scale personal savings can be appreciated from examining the structure of shareholding in these enterprises. Details were obtained from six manufacturing companies which in fact represent the largest of the establishments in this sector, the total paid-up capital of which amounted to over one half (JD 11.7 million) of the total paid-up capital of the companies in which the government is a shareholder. The capital provided by the private sector to these six companies amounted to JD 7.7 million and over 20 per cent of this capital came from individuals subscribing JD 250 and less (Table XII). Another 18 per cent came from shareholders in the JD 200-250 range. The participation of the government in the shareholding of these establishments was a decisive factor in getting

TABLE XII: Structure of Shareholding* in Selected Joint Stock Companies, 1966

		RANGE OF SHARES VALUE JD:	From 1 up to 50	Over 50 up to 100	Over 100 up to 150	Over 150 up to 200	Over 200 up to 250	Over 250 up to 500	Over 500 up to 1,000	Over 1,000 up to 5,000	Over 5,000 up to 10,000	Over 10,000
	Value of Shares	(JD)	22,825	196,885	487,890	182,130	128,285	820,405	733,205	533,550	183,500	350,000
	Number of Shareholders		1,011	3,661	5,220	653	635	3,139	1,231	392	35	14
	Value of Shares	(JD)	24,885	31,600	22,565	12,125	37,780	39,450	34,305	58,295		
	Number of Shareholders		631	348	165	62	151	128	42	30		
-	Value of Shares	(JD)	17,150	35,170	15,945	13,700	31,620	54,410	65,000	46,025	10,000	15,000
	Number of Shareholders		385	367	118	70	129	124	66	22	1	1
-	Value of Shares	(JD)	3,090	15,150	22,180	25,620	96,340	279,220	230,890	1,293,480		302,550
	Number of Shareholders		88	183	167	138	430	671	322	511		21
	Value of Shares	(JD)	7,930	12,055	7,850	3,535	18,235	48,890	31,005	65,500		
	Number of Shareholders		182	128	57	18	73	103	28	24		
-	Value of Shares	(JD)	67,085			111,013		123,649	151,881	128,544	277,576	114,110
	Number of Shareholders		1,563			719		358	242	95	72	5
	Value of Shares	(JD)	75,880	357,945	556,430	237,110	423,273	1,386,024	1,246,286	831,914	1,764,556	789,660
	Number of Shareholders		2,297	6,250	5,727	1,341	2,137	4,523	1,931	563	619	41
on:-	Value of Shares	%	1.0	4.7	7.3	3.1	5.5	18.1	16.2	10.8	23.0	10.3
	Number of Shareholders	%	9.0	24.6	22.5	5.3	8.4	17.8	7.6	2.2	2.4	0.2

* excludes government. For details of government shareholdings see Table XI.

Source: Data privately obtained from respective companies.

these projects off the ground and provided implicit security that encouraged small savers to invest in their shares. In fact investments in such companies have been throughout our period the only form of investment available to the private saver in Jordan other than depositing his funds in time or saving deposits in the commercial banks.[1] Insurance companies have been operating on a very limited scale with nearly all of them being branches of foreign enterprises. And there have been no savings or post-office banks, and of course a complete absence of public securities.

(e) Special Legislation. - In addition to the direct involvement of the government in the mobilization of saving as just described, legislative measures were undertaken to encourage the investment of both domestic and foreign capital. The Guidance and Encouragement of Industry Law (Law No. 27 of 1955) and the Encouragement of Investment of Foreign Capital Law (Law No. 28 of 1955) provided for the treatment of foreign capital on an equal footing with local capital permitting the free transfer of profits and expatriation of capital in addition to the following special privileges for capital (both domestic and foreign) invested in approved industries: exemption of imported machinery and construction materials from customs duties and all other fees; a three-year full exemption from income tax; and

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1. Many Jordanian savers, however, are known to have invested part of their savings in industrial companies' shares in surrounding Arab countries and especially in Syria prior to the nationalization measures.

another two years of up to 50 per cent income tax exemption. The Encouragement of Investment Law was subsequently enacted to replace both of these laws and extend their scope. This Encouragment of Investment Law (Law No. 1 of 1967) provided for the setting up of the Encouragement of Investment Committee and the Jordan Investment Promotion Office concerned with administering and furthering the effects of this law. In addition to the maintenance of the provisions regarding the equal treatment of foreign capital with local capital and the freedom of transfer of both profits and capital the full tax holiday was extended to six years to be followed by an exemption of up to 25 per cent of net profits if they are either reinvested or utilized for the building of employees' dwellings or other related facilities. In addition to these legislative measures, protection (both from imports or from local competition) was provided to various industrial enterprises thus further encouraging the process of industrial development.

So far in this part of our study we have examined the sources of saving and the mobilization of saving in the Jordan economy during our period. We next turn to examine some implications of the relationships in the Jordan economy between saving and investment on the one hand and the rate of growth of product during our period on the other.

(3) Saving and Investment and Economic Growth

One of the striking features of the rapid growth of the Jordan economy in recent years is the unexpected contrast between performance in the saving sphere and the high rate of growth which was achieved. Data previously presented (Table V) regarding private saving out of disposable income (both household and corporate) can be used to arrive at a measure of the marginal propensity to save which will be found to have been at a level of only 14 per cent. Although the marginal saving rate is higher than the average saving rate it is still relatively low especially when one remembers the rapid rate of growth during our period. Empirical studies have confirmed the expected heavy dependence of growth upon the saving and investment of the additional income that results from development efforts. In the case of Greece, for example, the effectiveness of foreign assistance has been found to be substantially enhanced by the relatively high marginal saving rate of 22 per cent: "additional savings out of the aid-induced increase in GNP have financed a higher proportion of additional investment than the aid itself."[1] The marginal propensity to save in the case of Jordan was in fact during our period much below comparable rates in aid-receiving developing countries: the mean marginal saving rate of a group of 31 such countries studied by

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1. H.B. Chenery, "Foreign Assistance and Economic Development," in IEA, Capital Movements and Economic Development, ed. J.H. Adler, p. 272. Professor Chenery adds that similar conclusions can be drawn from the successful aid experiences of Israel, Taiwan and the Philippines.

Chenery and Strout was given as 20 per cent.[1] How did Jordan then achieve an above-average rapid rate of growth in spite of the below-average, low performance in the saving sphere?

The answer lies in the relationship between investment and the growth of output during our period for as we have already seen the Incremental Capital Output Ratio in Jordan during our period comes to 2·1: in fact the ICOR of Jordan is the lowest in the 31-country sample of Chenery and Strout where it was given as 1·4, the next lowest being that of Pakistan given as 2·35.[2] It is this combination of this extremely low ICOR with a low saving performance (the data of Chenery and Strout give a marginal saving rate for Jordan of 9 per cent; these data relate to 1958-62) that has, in terms of the "mechanics" of development, resulted in the far above-average rate of growth (Chenery and Strout give Jordan the highest rate of growth amongst their 31-country sample: 11·1 per cent per annum). One of the criteria used by Chenery and Strout in evaluating the progress of aid-receiving countries towards self-sustaining growth is that the marginal propensity to save should be equal to or exceed the value of the ratio of investment to GNP needed for a 5 per cent GNP growth rate. This they call the saving criteria: $\frac{\Delta S}{\Delta Y} \geqslant 5K$ where ΔS and ΔY stand for change in savings and change in income respectively and K is

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1. Ibid., p. 273.

2. H.B. Chenery and A.H. Strout, "Foreign Assistance and Economic Development," American Economic Review, Vol. LVI, September 1966, pp. 679-733.

the incremental capital output ratio. For Jordan, the marginal propensity to save, 9 per cent, was found to exceed the ratio of investment to GNP needed for 5 per cent GNP growth which is 7 (5K = 5 X 1·4 = 7).

Notwithstanding criticisms of the concept of the ICOR and numerous pitfalls in it, further investigation of this question, viz., the low ICOR in the case of Jordan, can be useful in shedding light on certain interesting factors affecting the developing countries in general.

A study by Professor Kuznets has revealed that the developing countries in post-World War II years have had a lower ICOR than the advanced countries.[1] The highest economic level countries (as classified by per capita income levels) were found to have an ICOR of 6·3; this ratio fell to a level of 2·9 in the lower economic level class and rose to 3·4 in the third wide group of countries at the lowest end of the income scale.[2] The conjecture put forward by Professor Kuznets that such variation in the ICOR can be expected to result from sectoral shares in the growth of output in the various countries could not however be supported by the data he was investigating. The available data rather pointed to differences in the

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1. Simon Kuznets, "Quantitative Aspects of the Economic Growth of Nations. V. Capital Formation Proportions: International Comparison for Recent Years," Economic Development and Cultural Change, Vol. VIII, No. 4, Part II.

2. Ibid., p. 64, Table 15.

sectoral ICOR as being behind the differences in the overall ICOR between various countries. But, as Professor Kuznets put it, the available data reveal that "while the recent years were probably marked by a significant rise in capital formation proportions in the low-income, less developed countries, there was an even greater relative rise in the rate of growth of countrywide product per year; and as a result, at least for this short recent period, the incremental capital-output ratios were substantially lowered."[1]

Investigation of more recent data reveals further that amongst the developing countries themselves, those experiencing more rapid growth tend to have a lower ICOR than those showing lower rates of growth (Table XIII).

TABLE XIII: Incremental Capital Output Ratio and the Rates of Economic Growth in the Developing Countries, 1953/54 to 1962/63

Group *	Percentage Annual Rate of Growth of Real GDP	Gross Domestic Capital Formation as Percent. of GDP	Incremental Capital Output Ratio #
I (4)	7 to 11 per cent	21	2.6
II (5)	6 " "	17	2.8
III (12)	5 " "	15	3.1
IV (6)	4 " "	15	4.0
V (8)	3 " "	14	5.0
VI (2)	1 " "	14	over 10

* countries arranged in descending order of their annual rates of growth of GDP (real). Figures in brackets refer to number of countries within each group.

\# average weighted by the GDP of the countries in each group.

Source: S.J. Patel, "A Note on the Incremental Capital Output Ratio and Rates of Economic Growth in the Developing Countries," Kyklos, Vol. XXVI (1968), pp. 147-150.

1. Ibid., p. 68.

These data reveal an inverse correlation between the rate of growth and the ICOR, the higher rates of growth being associated with lower ICOR and vice-versa. While the rate of growth varied between wide limits, the level of capital formation in contrast varied within much narrower limits. The relationships here come in line with those identified by Professor Kuznets in his just-cited study in respect of the variation of capital formation proportions within much narrower limits than the variation of per capita income as between the different countries included in his study: the proportion of gross domestic capital formation to GDP varied only from 14 per cent in the lowest per capita income group of countries to 23.5 per cent in the highest per capita income group of countries.

These findings help emphasize that perhaps "too little" is isolated in investigating the relationship between the growth of output and capital formation especially as far as the developing countries are concerned. "Other factors" seem to have a decisive impact in determining this relationship between increases in capital and increases in output, in the developing countries, if the faster the rate of growth of output the lower the ICOR, as we have just seen. While the investigation of this phenomenon is beyond the scope of our study some observations may be useful in examining factors affecting the ICOR as far as Jordan is concerned.

W.B. Reddaway has put forward a more comprehensive list of factors that are important in investigating ICOR on a sectoral level:[1]

1. The Development of the Indian Economy (Homewood 1962), pp. 207-8.

in addition to the ICOR in the strictest sense which is given by technical factors, such factors as progress (better utilization of existing plant); shift system; excess capacity utilization in response to changes in demand; weather factors and gestation or lag period all will have effects in determining the increase in output that can be associated with investment.

On the overall aggregate level the difficulties in estimating such factors are compounded. Nevertheless there are certain factors whose qualitative effects are identifiable and an investigation of which can help account for the general direction of their effects on the ICOR. Foreign assistance, the rapidly increasing importance of which has rendered it "virtually a separate factor of production",[1] is one such factor influencing the ICOR.

Foreign Assistance and the Incremental Capital Output Ratio. - In principle the inflow of foreign resources into a developing economy can exert differing or even opposing influences on the ICOR of that economy depending upon the ways in which this aid is utilized. Evidently the utilization of such foreign resources in the finance of infra-structure tends to increase the ICOR. On the other hand the utilization of such resources in less capital-intensive investments (e.g. tourism) would tend to reduce, relatively speaking, the ICOR.

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1. Chenery and Strout, op. cit., p. 679.

This is just the same with the finance of investment from domestic resources. However, the decisive impact of foreign assistance on the ICOR can be expected to stem from the indirect effect of foreign assistance on an economy. This aspect we have previously investigated, when we found that import-surplus countries tend to show a concentration of economic activity in tertiary sectors. In the case of Jordan we found a concentration of activity especially in such sectors as trade and finance and services.

Thus foreign assistance can exert an influence towards reducing the ICOR through its effect upon the pattern of growth whereby production and income increase more via tertiary low-capital-requiring sectors rather than through capital-intensive activities.[1] In the case of Jordan, as comparison with other countries reveals, an above-average part of the increase in GDP came from tertiary sectors (such as trade and finance and services) which are normally assumed to be less capital-intensive than manufacturing or agriculture, the contribution of which to the increase in GDP has been at a lower level in Jordan than is found in countries at similar stages of development.

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1. As already mentioned, Professor Kuznets' analysis of the available data could not test such a hypothesis. The results he obtained were that it is variations in sectoral ICOR's rather than variations in the pattern of growth which accounted for variations in ICOR amongst groups of countries. As he pointed out, such results "may well be ... substantially modified with more extensive coverage" (Kuznets, op. cit., p. 65).

TABLE XIV: Sectoral Shares in the Rise in Gross Domestic Product, Countries Grouped by per Capita Product: 1951-1957 and Jordan 1954-1966

Sector Shares %	Groups of Countries by per capita Product			Jordan
	I & II	III & IV	V, VI & VII	
A Sector	7.0	18.5	25.8	19.0
M Sector	53.9	37.4	28.4	21.4
S Sector	39.1	44.2	47.6	59.6

Source: Simon Kuznets, "Quantitative Aspects of the Economic Growth of Nations. V. Capital Formation Proportions: International Comparison for Recent Years," Economic Development and Cultural Change, July 1960, p. 66. Jordan is not included in this source and relevant data obtained from data already given in Chapter III supra. For notes regarding definitions of sectors and country groupings see notes to Table XV) in that chapter.

Thus while Jordan falls among the wide grouping of countries in classes V, VI and VII, the share of the A sector in the increase in GDP is distinctly lower than the comparable share in the country-grouping. The same is the case with the M sector share, and the difference is made up by the substantially higher contribution of the S sector: 59.6 per cent in Jordan compared with 47.6 per cent in the relevant country-group. While, as already mentioned, this aspect of the economic development of Jordan (viz., the impact of the import surplus on economic structure) has been examined in the relevant part of our thesis, it is interesting at this juncture to relate this variable of the import surplus to the relationship between increases in capital and in output. As is shown in Table XV, available data indicate that

there is a tendency for countries with high levels of import surplus (as measured by the percentage ratio of foreign saving to GDP) in recent years to show a relatively lower ICOR in comparison with countries having a smaller import surplus.

TABLE XV: Developing Countries, Levels of Foreign Saving 1962-1964 and Incremental Capital Output Ratios, 1952/54 to 1962/63

Group *	Foreign Saving * (% of GDP)	Incremental Capital Output Ratio *
I	22	2.4
II	8	3.0
III	3	3.5
IV	1	4.2

* countries are grouped in descending order of the level of foreign saving. Countries included are:- Group I: Israel and Jordan; Group II: Trinidad and Tobago, Panama, Republic of Korea, Costa Rica; Group III: United Arab Republic, Ghana, Sudan, Guatemala, Colombia, India, Chile and Ecuador; and Group IV: Taiwan, Mexico, Thailand, Iran, Ceylon, Paraguay, Burma, Rhodesia and Nyasaland and Morocco.

* arithmetic means of ratios given in source.

Source: U.N. World Economic Survey 1965, pp. 15 and 17. For certain differences in time period and concepts see notes in source. Data for Jordan from material already presented.

From this table it can be seen that countries like Jordan and Israel which have received foreign saving in excess of 20 per cent of their GDP have an average ICOR about one half the average ICOR found for countries which have received hardly any saving (Group IV with an ICOR of 4.2 and Group I with an ICOR of 2.4). As already emphasized, the concept of the ICOR contains many pitfalls and the data

in Table XV should be taken as merely indicating a possible empirical evidence for a relationship that one can a priori expect, viz., the fall in ICOR resulting from the services-skewed pattern of growth induced by large import surpluses. To be sure further effects of foreign aid on the ICOR can be expected. For one, while domestic saving represents a withdrawal of consumption, foreign saving does not involve such a withdrawal. And while the import-content of the capital formation financed by domestic saving represents a "leakage" of aggregate demand from the economy, the "domestic-content" of the capital formation financed by foreign saving represents an injection of aggregate demand. Any excess capacity can be thus more fully utilized resulting in an increase in output with little or no additional capital formation. Such an effect of inducing a fuller utilization of excess capacity becomes especially decisive if foreign saving helps to finance the foreign-exchange requirements for raw materials or spare parts which were previously, due to foreign exchange shortages, not available and thus preventing a fuller utilization of installed capacity.[1] In fact, as we had earlier on in our thesis noted, the growth of production in the Jordan economy can be viewed as being greatly stimulated through the injection of effective demand into the

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1. This impact of foreign aid falls within the "trade gap" effect of the "three gaps" approach (skills, saving, and trade gaps) of Chenery and Strout. The effect of aid in accelerating growth through relieving such shortages of raw materials is mentioned by Chenery and Strout in their article, but no mention is made of the corollary of such an effect, viz., a reduction of ICOR.

economy via the various foreign transfers received by the public and private sectors. The degree of response of the domestic sectors to this increased effective demand would depend upon the elasticity of supply of the various sectors. Sectors dealing with non-importables (i.e. tertiary sectors) would tend to increase their output more proportionately for the other primary and secondary sectors have to compete with the "free" inflow of imports. Thus if these tertiary sectors in which the largest relative expansion occurred were those same sectors that had low marginal capital requirements then it is only to be expected that the overall ICOR in Jordan would tend to be lower than that found in countries experiencing a more structurally-balanced expansion of economic activity.

CONCLUSION

CONCLUSION

A gradual economic revival occurred in the area of Greater Syria (of which Jordan was a peripheral part) from the beginning of the nineteenth century onwards. While this slow process proceeded right through to the Second World War and beyond, the Arab-Israeli War of 1948 and the consequent emergence of Jordan in a fundamentally changed form marked the opening up of what one might call a new 'economic epoch' for the Jordan economy. The sudden increase in population; the new political set-up; the new economic framework and the large-scale inflow of foreign resources all resulted in what might be viewed as the 'exposure' of the domestic sectors of the economy, for a prolonged period, to a high level of aggregate demand. Private enterprise, assisted by the government, responded vigourously to this sharp stimulus and GDP (at current prices) trebled during the twelve years 1954-1966.

These conditions within which the economy developed have had however a marked effect upon the structure with which the economy emerged. More specifically, the conditions of import surplus within which production was expanded led to the emergence of a heavy, services-oriented skew in the structure of the economy. The experience of Jordan in this respect has been shared to varying

degrees by a number of developing, import-surplus countries. This indicates an interesting side-effect of foreign assistance which has received little attention, viz., the 'embodiment' of the dependence on aid in the structure of the recipient economies, whereby the economy builds itself, so to speak, around the inflow of aid. Such a development evidently has far-reaching economic and political implications and poses for countries experiencing such a pattern of development the problem of attempting to achieve a more structurally balanced economy through taking positive steps to develop their primary and secondary sectors and thus reduce the heavy dependence of production and employment on activities within the tertiary sectors which are themselves dependent upon the continuous inflow of foreign resources.

An important feature of this period of 'exposure' of the economy to a high level of aggregate demand was the absence of any inflationary consequences that one may expect to materialize. Indeed this rapid economic growth occurred within the framework of a remarkable monetary stability. The adopted monetary system (plus public finance policies) and the continuous inflow of foreign resources largely removed any would-be dichotomy between the real and monetary sides of the economy and enabled this system to function smoothly through the 'free' interplay of the forces of supply and demand. However, such monetary stability was accompanied by an excessive liquidity: both foreign assets and, towards the latter

part of the period, domestic assets in highly liquid forms provided a considerable potential for mobilizing, through a more positive monetary policy, additional funds for the finance of development.

In spite of the concentration of economic activity in tertiary sectors, both the agricultural and manufacturing sectors exhibited rapid growth during our period. The development of agriculture proceeded through irrigation and intensive farming in the fruits and vegetables sub-sectors. One interesting aspect of this development has been the rôle of these 'modern' sub-sectors in providing opportunities for the employment of a new agricultural labour force. Thus while a 'release' of agricultural population occurred through the development (mechanization) of the traditional sub-sectors, an 'absorption' of additional labour occurred through the development of the fruits and vegetables sub-sectors and available evidence indicates that on balance the agricultural sector increased the percentage of the potential labour force that it employed.

The extremely backward manufacturing sector which existed at the outset of our period was rapidly developed: initially through the indirect effects of the dislocation of 1948, and subsequently through exploiting the increasing potential for import substitution, modern manufacturing industries were set up by the private sector assisted in many instances by the government. However as a result of this development of manufacturing there emerged a heavy dependence in the Jordan economy upon imported inputs in consequence of the

general absence of domestic raw materials.

While throughout our period a large trade gap persists, towards the latter part of the period exports start to increase at a more rapid rate than imports as a result of developments within both the agricultural and manufacturing sectors which begin to contribute increasingly to exports. Imports during this latter period exhibit more moderate increases in comparison with the earlier part of the period when the growth of output in the agricultural sector was seriously affected by repeated droughts, thus resulting in a rapid increase in foodstuffs imports. In fact imports during this earlier period play the vital rôle (thanks to the inflow of aid which financed the import surplus) of providing an adequate supply of food thus permitting the growth of the secondary and tertiary sectors to proceed in spite of the inadequate performance in the agricultural sector.

The foreign transfers that helped finance the import surplus played as well the important rôle of financing in the first place public expenditures since the larger part (about two thirds) of such transfers went initially to the government. This enabled the government to finance a relatively high level of expenditure (about one third of GDP) without placing comparable pressures on the private sector. But a corollary of this situation has been the dependence of the government for its revenue both directly and indirectly upon foreign transfers: while the government depends directly on the budget support it receives from abroad, the revenue it collects domestically

is also to a large extent dependent upon foreign transfers which help finance the imports of the country that provide, through customs duties, the larger part of domestic public revenue.

The private sector supplied the bulk of the domestic saving that financed the capital formation that occurred during this period. The remarkable monetary stability which the economy enjoyed coupled with the absence of a heavy tax burden on the private sector (thanks to the rôle of foreign transfers in supplementing the government's domestic revenues) provided a favourable environment for the growth of private saving. Furthermore while the government participated in the finance of development primarily through its outlays on infra-structure, a number of specific policy measures were implemented by the government which further stimulated and mobilized private saving, e.g. the government's participation in the finance of certain projects in the private sector; the setting up of specialized credit institutions. However, an interesting aspect in connection with the finance of development has been the remarkably low level of capital formation that occurred during our period in comparison with the rate of growth of output that was achieved. This aspect of a low ICOR is in fact a reflection or a corollary of the pattern of growth that occurred: while through the inflow of foreign transfers and the resultant import surplus the growth of total production in the economy came primarily via the expansion of tertiary low-capital-requiring activities, then it is only to be expected that the ICOR

would tend to be reduced in comparison with countries experiencing a more structurally balanced growth.

While the period of our study ends in 1966 mention ought to be made of the effects of the Arab-Israeli War of 1967 on the Jordan economy. Although the inavailability yet of adequate data as a result of the short period that has elapsed since this last war does not permit any firm conclusions to be drawn in this regard beyond the level of personal speculation, the findings of our study can shed considerable light on the present situation and help place these events and their effects in proper perspective.

The point to be immediately stressed in this connection is that, contrary to the widespread belief that these events have dealt a shattering blow to the Jordan economy, they have in reality pushed the Jordan economy forward along broadly the same lines which we have identified in our study and which it has been following since 1948. The influx of refugees to the east bank following the occupation of the west bank greatly accelerated the west-east migratory move which we have discerned. Whatever loss of foreign exchange receipts occurred as a result of the adverse effects on tourism and the reduction in factor income from abroad has been more than compensated for through the large increase in foreign transfers. The Arab countries now provide the Jordan government with assistance totalling JD40 million annually. Activity within the tertiary sectors of the economy (which are the dominant sectors) has not been

accordingly adversely affected since, as we have seen, the growth of these sectors is a reflection of the inflow of foreign transfers and the import surplus which the country still enjoys. As aggregate demand depends on the level of real income, the increasing injection of foreign transfers into the economy has helped compensate for whatever loss of aggregate demand occurred in consequence of the occupation of the west bank. In fact the economy of the west bank, which is predominantly agricultural, is still a part of the Jordan economy as far as agricultural production is concerned, since the export of agricultural products is still freely permitted between the two banks. Manufacturing industry, which is mainly located on the east bank, suffered initially from the loss of markets on the west bank as a customs barrier was erected by the occupation authority in respect of manufactured goods coming into the west bank. However, the stimulation of aggregate demand on the east bank through the increasing inflow of foreign transfers, plus the expansion of manufactured products' exports to the surrounding countries, have both helped reduce the adverse effects of the loss of markets on the west bank. If anything, the concentration of economic activity in tertiary sectors has been further increased, thus further stressing the importance of developing a more structurally balanced economy.

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